

May 30, 2014

Project No. 063-7109-914

Ms. Dyan Whyte
Assistant Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

RE: Quarterly Report, Water Code Section 13267 Order No R2-2013-1005-A1, Order Item No. 7, Lehigh Southwest Cement Company, Permanente Facility, 24001 Stevens Creek Boulevard, Cupertino, California.

Dear Ms. Whyte:

Golder Associates Inc. (Golder), on behalf of Lehigh Southwest Cement Company (Lehigh), has prepared this First (1st) Quarter 2014 Summary Report for the Lehigh Permanente Cement Plant and Quarry (Site) located at 24001 Stevens Creek Boulevard in Santa Clara County, California. This report was prepared pursuant to Order Item No. 7 set forth in Water Code section 13267 Order No. R2-2013-1005-A1 (Order) amended by the San Francisco Bay Regional Water Quality Control Board (RWQCB) on June 27, 2013.

1.0 MONITORING REQUIREMENTS

Order Item No. 7 requires the sampling of locations specified on Table 1 below. Table 1 is derived from the Order Item No. 7 Table A.1 sample locations (additional sampling locations are included on Order Table A.1 that pertain to Order Items 8 and 11 and therefore are excluded from Table 1 below). Consistent with the Order, monitoring locations that overlap with outfalls identified in the Sand and Gravel (S&G) permit may be appropriately referenced and are not resampled for Order Item No. 7.

Table 1: Monitoring Requirements and Details

Sample Number ¹	Sample Description	Frequency	Constituents	Sampling Details
1	Downstream Sample Location	Per S&G permit; Quarterly for PP13 metals ²	S&G Permit Conventional Pollutants (CP) plus CTR PP13 total metals	Quarterly sampling occurred on 2/6/14
6	Pond 30	Per Industrial SW Permit	Industrial SW Permit plus CTR PP13 total metals	Sampled per Industrial SW Permit; metals were sampled on 2/27/14
10	Pond 21	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Sampled per S&G permit; metals sampled on 2/6/14
11	Pond 20	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Sampled per S&G permit; metals sampled on 2/6/14
12	Laboratory Parking Lot	Per Industrial SW Permit	Industrial SW Permit	Sampled per Industrial SW Permit on 2/28/14



Sample Number ¹	Sample Description	Frequency	Constituents	Sampling Details
13	DS RW Emergency Bypass	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Not sampled - no discharge from Emergency Bypass in 1 st Quarter 2014
14	Emergency Bypass	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Not sampled - no discharge in 1 st Quarter 2014
15	DS RW Pond 17	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Sampled per S&G permit; metals sampled on 2/6/14
17	Pond 17 Outfall	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Sampled per S&G permit; metals sampled on 2/6/14
18	DS RW Dinky Shed	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Not sampled - no discharge from Dinky Shed in 1 st Quarter 2014
19	Dinky Shed Overflow	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Not sampled - no discharge in 1 st Quarter 2014
20	DS RW Pond 9	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Sampled per S&G permit; metals sampled on 2/6/14
21	DS RW Rock Plant Sump	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Not sampled - no discharge from Rock Plant Sump in 1 st Quarter 2014
22	Rock Plant Overflow	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Not sampled - no discharge in 1 st Quarter 2014
23	Pond 9 Outfall	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Sampled per S&G permit; metals sampled on 2/6/14
24	Pond 13 DS RW	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Sampled per S&G permit; metals sampled on 2/27/14 ³
27	Pond 13 B	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Sampled per S&G permit; metals sampled on 2/27/14
28	DS Pond 4a, inflow to Pond 13	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Sampled per S&G permit; metals sampled on 3/6/14
29	Historic Buried Pipe	Monthly when flowing	S&G CP plus CTR PP13 total metals	Not sampled - no discharge in 1 st Quarter 2014
31	Pond 4a	Per S&G permit; Quarterly for PP13 metals	S&G CP plus CTR PP13 total metals	Sampled per S&G permit; metals sampled on 3/6/14
32	Background	Quarterly	S&G CP plus CTR PP13 total metals	Not sampled - sample location was dry when attempted to sample on 1/15/14 and 3/20/14

1: 13267 Order Table A.1 Sample Location Designation; DS = downstream, RW = receiving water

2: This sampling location is not required to be sampled per the Sand & Gravel General Permit; thus, only quarterly sampling was performed.

3: Hexavalent chromium sample was collected on 2/28/14.

2.0 SAMPLING SUMMARY

The 1st Quarter 2014, Item 7, sampling results are summarized on the attached Tables 2 and 3. The laboratory analytical reports are also enclosed. Since it is not required as part of Order Item No. 7, the upstream receiving water sample locations are not summarized on Tables 2 and 3; however, the data is included in the enclosed laboratory analytical reports. Duplicate samples of the downstream sample location were collected as part of the monitoring and sampling program. Field blanks were also collected as part of the sampling events when metals were analyzed.

As part of S&G permit routine monitoring, 16 of the 21 sample locations listed on Table 1 and shown on Figure 1 are monitored and sampled. Of the 16 S&G permit routine monitoring locations, 10 were sampled during the 1st Quarter 2014. The other six locations were not sampled as no discharges were noted or they were dry (Table 1). The data from the S&G permit routine monitoring for the 1st Quarter 2014 were

summarized in Lehigh's 1st Quarter 2014 Self-Monitoring Report (SMR). These data are also included herein (Table 2).

The five locations included in Order Item No. 7 that are not covered under the S&G permit are as follows:

- Downstream (Sample Number 1)
- Pond 30 (Sample Number 6)
- Laboratory Parking Lot (Sample Number 12)
- Historic Buried Pipe (Sample Number 29)
- Background (Sample Number 32)

As part of the 1st Quarter 2014 sampling, Golder sampled Downstream (Sample Number 1), Pond 30 (Sample Number 6), and Laboratory Parking Lot (Sample Number 12). The two other non S&G permit locations were not sampled as no discharges were noted or they were dry during the 1st Quarter (Table 1).

Monitoring and sampling were conducted in accordance to Golder's standard operating procedures. Golder measured field parameters with a Myron Ultrameter II or YSI 556 water-quality meter, HACH chlorine test kit, and a LaMotte turbidity meter. Golder followed to the extent practicable the EPA recommended "clean hands/dirty hands" sampling protocol for the collection of samples to be analyzed by EPA methods 1631 and 1638. Golder submitted the samples to Alpha Analytical Laboratories Inc. (Alpha) under proper chain of custody for laboratory analysis of the S&G conventional pollutants and CTR PP13 total metals. Alpha subcontracted with Brooks Rand Labs for select metals analyses.

3.0 CLOSING

This report has been prepared and reviewed by the undersigned.

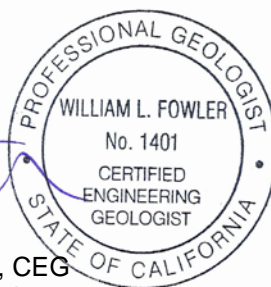
GOLDER ASSOCIATES INC.



George C. Wegmann
Senior Geologist



William L. Fowler, PG, CEG
Principal/Program Leader



cc: Greg Knapp, Lehigh Southwest Cement Company
Nicole Granquist, Downey Brand LLP

Attachments

Figure 1: Item 7 Sample Locations
Table 2: S&G Data Summary
Table 3: PP13 Metals Summary
Laboratory Analytical Reports

TABLES

Table 2: Sand and Gravel and Industrial SW Data Summary
Order Item No. 7
Lehigh Southwest Cement Company Permanente Plant
First Quarter 2014

Sample Location	Sample Description	Units Test Method	Flow Rate		Turbidity NTU Field	pH s.u. Field	Chlorine Residual mg/L Field	Temp C Field	DO mg/L Field	Chloride mg/L EPA 300.0			TSS mg/L SM2540D			Total Set Mat mL/L/hr SM2540F			TDS mg/L SM2540C			O&G mg/L EPA 1664			Hardness mg/L SM2340B			Salinity g/kg SM2520B			TOC mg/L SM5310C			
			gpm	MGD						Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result
		Date	Field		Result	Result	Result	Result	Grab	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	
1	Site Downstream Sample Duplicate (Downstream)	2/6/2014	-	-	14.4	7.87	-	10.42	9.72	100	0.75	12	-	-	-	-	-	-	1000	5.0	10	-	-	-	537^	1	5	ND	2.0	2.0	-	-	-	
		2/6/2014	-	-	-	-	-	-	-	98	0.75	12	-	-	-	-	-	-	1100	5.0	10	-	-	-	510^	1	5	ND	2.0	2.0	-	-	-	
6	Pond 30	2/27/2014	15	0.0216	58.23	7.49	ND	12.69	9.34	-	-	-	26	0.30	1.0	-	-	-	-	-	-	ND	0.80	5.0	-	-	-	-	-	-	-	-	-	
10	Pond 21	2/6/2014	-	-	26.3	8.07	-	10.14	7.51	66	0.75	12	-	-	-	-	-	-	1000	5.0	10	-	-	-	796^	1	5	ND	2.0	2.0	-	-	-	
		2/28/2014	-	-	21.1	7.63	-	14.01	4.42	84	0.75	12	-	-	-	-	-	-	1100	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/31/2014	-	-	54	7.55	-	12.64	8.77	35	0.15	2.5	-	-	-	-	-	-	630	5.0	10	-	-	-	592	1	5	ND	2.0	2.0	-	-	-	
11	Pond 20	2/6/2014	20	0.029	11.89	8.66	ND	8.81	11.89	56	0.75	12	480	0.30	0.50	1.2	0.10	0.10	1000	5.0	10	2.0	0.80	1.4	-	-	-	-	-	-	-	-	-	
		2/8/2014	5	0.007	861	8.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/28/2014	30	0.043	41	8.98	ND	13.74	9.72	72	0.60	10	57	0.30	0.50	ND	0.10	0.10	940	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/1/2014	3	0.004	19.8	8.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/31/2014	100	0.144	60	9.60	ND	11.44	12.05	15	0.030	0.50	1000	0.30	0.50	ND*	0.10	0.10	470	5.0	10	1.4^	0.80	1.4	-	-	-	-	-	-	-	-	-	
12	Laboratory Parking Lot	2/28/2014	1	0.001	2.56	8.17	ND	13.02	9.23	-	-	-	2.5	0.30	1.0	-	-	-	-	-	-	2.9 J	0.80	5.0	-	-	-	-	-	-	13.2	0.1	0.3	
15	Pond 17 Downstream RW	1/3/2014	-	-	4.28	7.59	-	9.49	9.30	91	0.75	12	-	-	-	-	-	-	1700	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		1/9/2014	-	-	2.58	7.43	-	10.91	7.77	100	0.75	12	-	-	-	-	-	-	1600	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		1/15/2014	-	-	3.13	7.55	-	10.82	9.6	120	0.75	12	-	-	-	-	-	-	1500	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		1/23/2014	-	-	11.48	8.22	-	11.48	10.16	140	0.75	12	-	-	-	-	-	-	1100	5.0	10	-	-	-	362	1	5	ND	2.0	2.0	-	-	-	
		2/6/2014	-	-	22.6	8.18	-	10.54	10.28	91	0.75	12	-	-	-	-	-	-	1200	5.0	10	-	-	-	657^	1	5	ND	2.0	2.0	-	-	-	
		2/12/2014	-	-	8.79	8.03	-	12.44	7.99	150	0.75	12	-	-	-	-	-	-	970	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		2/20/2014	-	-	0.49	7.61	-	13.21	7.08	140	1.5	25	-	-	-	-	-	-	2000	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		2/28/2014	-	-	37.3	8.64	-	14.01	9.11	70	0.60	10	-	-	-	-	-	-	920	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/6/2014	-	-	5.58	8.08	-	15.22	8.90	39	0.75	12	-	-	-	-	-	-	1100	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/30/2014	-	-	2.21	8.12	-	14.95	11.32	23^	0.60	10	-	-	-	-	-	-	1000	5.0	10	-	-	-	653	1	5	ND	2.0	2.0	-	-	-	
17	Pond 17 Discharge	1/3/2014	75	0.108	4.05	7.72	ND	8.42	10.73	91	0.75	12	5.2	0.30	0.50	ND*	0.10	0.10	1800	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		1/4/2014	75	0.108	1.74	7.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/6/2014	60	0.086	0.86	7.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/7/2014	5	0.007	1.08	7.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/8/2014	5	0.007	2.90	7.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/9/2014	60	0.086	2.65	7.73	ND	9.17	10.63	110	0.75	12	-	-	-	ND	0.10	0.10	1600	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	-
		1/10/2014	60	0.086	1.93	7.71	-	-	-	-	-	-	8.7	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/11/2014	100	0.144	1.35	7.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/13/2014	75	0.108	3.32	7.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/14/2014	40	0.058	3.18	7.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/15/2014	40	0.058	4.55	7.73	ND	8.83	12.74	130	0.75	12	-	-	-	ND	0.10	0.10	1600	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	-
		1/16/2014	20	0.029	3.77	7.55	-	-	-	-	-	-	2.9	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/17/2014	20	0.029	2.94	7.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/18/2014	50	0.072	2.61	7.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/22/2014	15	0.022	0.85	7.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/23/2014	10	0.014	1.45	7.72	ND	10.73	9.91	110	0.75	12	-	-	-	ND	0.10	0.10	2000	5.0	10	1.0 J	0.80	1.4	-	-	-	-	-	-	-	-	-	-

Table 2: Sand and Gravel and Industrial SW Data Summary
Order Item No. 7
Lehigh Southwest Cement Company Permanente Plant
First Quarter 2014

Sample Location	Sample Description	Units Test Method	Flow Rate		Turbidity NTU Field	pH s.u. Field	Chlorine Residual mg/L Field	Temp C Field	DO mg/L Field	Chloride mg/L EPA 300.0			TSS mg/L SM2540D			Total Set Mat mL/L/hr SM2540F			TDS mg/L SM2540C			O&G mg/L EPA 1664			Hardness mg/L SM2340B			Salinity g/kg SM2520B			TOC mg/L SM5310C			
			gpm	MGD						Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result
		Date	Field		Result	Result	Result	Result	Grab	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	
17	Pond 17 Discharge cont.	1/24/2014	75	0.108	0.97	7.64	-	-	-	-	-	-	3.6	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		1/25/2014	50	0.072	2.99	7.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/26/2014	15	0.022	1.09	7.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/27/2014	50	0.072	2.87	7.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1/28/2014	70	0.101	3.68	7.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/1/2014	5	0.007	2.02	7.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/2/2014	70	0.101	1.31	8.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/3/2014	15	0.022	1.61	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/4/2014	1	0.001	1.74	7.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/5/2014	40	0.058	0.92	7.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/6/2014	70	0.101	13.7	7.83	ND	10.80	-	90	1.5	25	3.4	0.30	0.50	ND	0.10	0.10	1900	5.0	10	1.3 J	0.80	1.4	-	-	-	-	-	-	-	-	-	-
		2/7/2014	10	0.014	27.1	7.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/8/2014	60	0.086	30	7.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/9/2014	50	0.072	14.7	7.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/10/2014	40	0.058	16.3	7.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/11/2014	40	0.058	18.6	7.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/12/2014	50	0.072	4.73	7.85	ND	11.33	9.30	120	1.5	25	-	-	-	ND	0.10	0.10	1800	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/13/2014	5	0.007	4.38	7.93	-	-	-	-	-	-	3.0^	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/14/2014	150	0.216	3.18	7.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/15/2014	40	0.058	1.48	7.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/17/2014	10	0.014	2.13	7.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/18/2014	10	0.014	1.56	7.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/19/2014	80	0.115	1.21	7.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/20/2014	40	0.058	3.02	7.77	ND	13.02	9.29	130	1.5	25	-	-	-	ND	0.10	0.10	2300	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/21/2014	50	0.072	9.51	7.98	-	-	-	-	-	-	20^	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/22/2014	40	0.058	9.13	7.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/24/2014	75	0.108	5.04	7.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/25/2014	20	0.029	4.14	7.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/26/2014	80	0.115	4.27	7.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/27/2014	150	0.216	44.36	7.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2/28/2014	100	0.144	35.1	8.14	ND	14.65	8.09	73	0.75	12	19	0.30	0.50	0.10	0.10	0.10	1000	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/1/2014	100	0.144	16.1	7.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/2/2014	105	0.151	20.77	7.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/3/2014	50	0.072	16.86	7.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/4/2014	60	0.086	10.85	7.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/5/2014	75	0.108	12.63	7.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/6/2014	1	0.001	3.05	8.06	ND	15.99	8.44	130	1.5	25	-	-	-	ND	0.10	0.10	1500	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/7/2014	0	0.000	-	-	-	-	-	-	-	-	80	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/22/2014	5	0.007	3.81	7.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2: Sand and Gravel and Industrial SW Data Summary
Order Item No. 7
Lehigh Southwest Cement Company Permanente Plant
First Quarter 2014

Sample Location	Sample Description	Units Test Method	Flow Rate		Turbidity NTU Field	pH s.u. Field	Chlorine Residual mg/L Field	Temp C Field	DO mg/L Field	Chloride mg/L EPA 300.0			TSS mg/L SM2540D			Total Set Mat mL/L/hr SM2540F			TDS mg/L SM2540C			O&G mg/L EPA 1664			Hardness mg/L SM2340B			Salinity g/kg SM2520B			TOC mg/L SM5310C			
			gpm	MGD						Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result
		Date	Field		Result	Result	Result	Result	Grab	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	
17	Pond 17 Discharge cont.	3/29/2014	5	0.007	3.31	7.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/30/2014	3	0.004	13.2	8.11	ND	16.07	9.83	96^	0.60	10	20	0.30	0.50	ND	0.10	0.10	720	5.0	10	3.0	0.80	1.4	-	-	-	-	-	-	-	-	-	
		3/31/2014	50	0.072	19.8	7.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
20	Pond 9 Downstream RW	1/2/2014	-	-	1.07	7.52	-	8.71	10.57	82	0.75	12	-	-	-	-	-	-	1500	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		1/9/2014	-	-	0.47	7.36	-	11.12	7.98	93	0.75	12	-	-	-	-	-	-	1200	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		1/15/2014	-	-	1.79	7.46	-	10.67	10.53	90	0.60	10	-	-	-	-	-	-	1300	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		1/23/2014	-	-	26.0	8.38	-	11.84	10.53	140	0.75	12	-	-	-	-	-	-	920	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		1/30/2014	-	-	7.70	7.29	-	12.68	9.02	100	0.75	12	-	-	-	-	-	-	1100	5.0	10	-	-	-	612	1	5	ND	2.0	2.0	-	-	-	
		2/6/2014	-	-	48.0	8.35	-	10.57	10.65	92	0.60	10	-	-	-	-	-	-	860	5.0	10	-	-	-	457^	1	5	ND	2.0	2.0	-	-	-	
		2/12/2014	-	-	47.6	8.39	-	12.30	7.92	150	0.75	12	-	-	-	-	-	-	770	5.0	10	-	-	-	-	-	-	-	-	-	-	-		
		2/20/2014	-	-	0.3	7.40	-	12.71	7.23	110	1.5	25	-	-	-	-	-	-	1700	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		2/28/2014	-	-	174.5	9.1	-	13.75	9.28	67	0.60	10	-	-	-	-	-	-	620	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/6/2014	-	-	1.53	7.87	-	15.04	8.89	35	0.75	12	-	-	-	-	-	-	1100	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/13/2014	-	-	4.15	7.90	-	14.94	8.20	84	0.75	12	-	-	-	-	-	-	1000	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/20/2014	-	-	0.75	7.93	-	15.44	7.86	63	0.75	12	-	-	-	-	-	-	980	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/26/2014	-	-	0.44	7.91	-	14.95	7.62	19	0.60	10	-	-	-	-	-	-	1000	5.0	10	-	-	-	641	1	5	ND	2.0	2.0	-	-	-	
		23	Pond 9 Discharge	1/2/2014	50	0.072	1.92	7.42	ND	8.43	10.94	77	0.75	12	-	-	-	ND	0.10	0.10	1200	5.0	10	-	-	-	-	-	-	-	-	-	-	-
				1/3/2014	15	0.022	1.51	7.50	-	-	-	-	-	-	2.4	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/4/2014	15			0.022	1.50	7.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/6/2014	15			0.022	2.02	7.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/7/2014	60			0.086	1.07	7.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/8/2014	15			0.022	0.32	7.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/9/2014	15			0.022	0.87	7.24	ND	10.32	7.38	73	0.75	12	-	-	-	ND	0.10	0.10	1100	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
1/10/2014	15			0.022	1.73	7.38	-	-	-	-	-	-	2.8	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/11/2014	15			0.022	2.31	7.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/13/2014	15			0.022	2.65	7.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/14/2014	75			0.108	0.90	7.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/15/2014	15			0.022	2.55	7.40	ND	9.98	10.88	75	0.60	10	-	-	-	ND	0.10	0.10	1300	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
1/16/2014	15			0.022	2.55	7.46	-	-	-	-	-	-	3.4	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/17/2014	20			0.029	1.61	7.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/18/2014	15			0.022	3.76	7.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/20/2014	70			0.101	1.48	7.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/21/2014	125			0.180	3.86	8.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/22/2014	150			0.216	7.94	8.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/23/2014	150			0.216	29.4	8.31	ND	12.07	9.43	150	0.75	12	-	-	-	0.10	0.10	0.10	820	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
1/24/2014	20			0.029	5.33	7.77	-	-	-	-	-	-	12	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/25/2014	40			0.058	11.9	7.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/26/2014	20			0.029	2.76	7.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/27/2014	40			0.058	9.98	7.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/28/2014	40			0.058	7.51	7.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/29/2014	20			0.029	5.00	8.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/30/2014	15			0.022	6.10	7.17	ND	12.78	9.80	96	0.75	12	-	-	-	ND	0.10	0.10	960	5.0	10	0.80 J	0.80	1.4	-	-	-	-	-	-	-	-		
1/31/2014	15			0.022	2.7	7.48	-	-	-	-	-	-	ND	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2/1/2014	15	0.022	6.53	7.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2/2/2014	30	0.043	3.06	7.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

Table 2: Sand and Gravel and Industrial SW Data Summary
Order Item No. 7
Lehigh Southwest Cement Company Permanente Plant
First Quarter 2014

Sample Location	Sample Description	Units Test Method	Flow Rate		Turbidity NTU Field	pH s.u. Field	Chlorine Residual mg/L Field	Temp C Field	DO mg/L Field	Chloride mg/L EPA 300.0			TSS mg/L SM2540D			Total Set Mat mL/L/hr SM2540F			TDS mg/L SM2540C			O&G mg/L EPA 1664			Hardness mg/L SM2340B			Salinity g/kg SM2520B			TOC mg/L SM5310C		
			gpm	MGD						Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL
		Date	Field		Result	Result	Result	Result	Grab	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL
23	Pond 9 Discharge cont.	2/3/2014	20	0.029	9.67	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/4/2014	20	0.029	13.7	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/5/2014	15	0.022	2.39	7.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/6/2014	700	1.008	74.1	8.21	ND	10.55	9.38	82	0.60	10	6.5	0.30	0.50	0.50	0.10	0.10	840	5.0	10	1.0 J	0.80	1.4	-	-	-	-	-	-	-	-	-
		2/7/2014	300	0.432	67.0	8.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/8/2014	200	0.288	196	7.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/9/2014	200	0.288	93.7	8.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/10/2014	200	0.288	94.5	8.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/11/2014	150	0.216	59.7	7.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/12/2014	200	0.288	53.1	8.25	ND	12.45	6.65	150	0.75	12	-	-	-	ND	0.10	0.10	730	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-
		2/13/2014	50	0.072	39.1	8.42	-	-	-	-	-	-	16^	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/14/2014	15	0.0216	2.95	8.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/15/2014	50	0.072	7.88	8.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/17/2014	15	0.022	10.75	7.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/18/2014	50	0.072	18.35	7.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/19/2014	15	0.022	2.21	7.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/20/2014	5	0.007	2.11	7.47	ND	13.20	6.99	93	0.75	12	-	-	-	ND	0.10	0.10	1200	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-
		2/21/2014	75	0.108	20.51	7.83	-	-	-	-	-	-	4.5^	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/22/2014	5	0.007	2.20	7.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/24/2014	30	0.043	3.83	7.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/25/2014	30	0.043	3.84	7.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/26/2014	20	0.029	29.76	7.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/27/2014	40	0.058	133.0	7.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2/28/2014	250	0.360	180	9.19	ND	13.81	7.61	61	0.60	10	20	0.30	0.50	ND	0.10	0.10	550	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-
		3/1/2014	250	0.360	184	8.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/2/2014	200	0.288	110.4	8.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/3/2014	100	0.144	56.32	8.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/4/2014	45	0.065	64.14	8.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/5/2014	60	0.086	40.50	7.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/6/2014	20	0.029	22.00	7.49	ND	15.42	5.47	110	0.75	12	-	-	-	ND	0.10	0.10	930	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-
		3/7/2014	20	0.029	8.72	7.60	-	-	-	-	-	-	6.6	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/8/2014	50	0.072	6.17	7.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/9/2014	75	0.108	8.19	7.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/10/2014	3	0.004	5.55	7.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/11/2014	50	0.072	4.64	7.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/12/2014	5	0.007	6.48	7.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/13/2014	800	1.152	5.16	7.83	0.2	15.78	7.72	94	0.75	12	-	-	-	ND	0.10	0.10	1100	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-
		3/14/2014	500	0.720	2.83	7.91	ND	-	7.63	-	-	-	25	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/15/2014	65	0.094	2.79	7.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/17/2014	1000	1.440	8.80	7.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/18/2014	100	0.144	4.03	7.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/19/2014	75	0.108	2.38	7.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/20/2014	250	0.360	1.84	7.99	ND	17.88	6.92	110	0.75	12	-	-	-	ND	0.10	0.10	960	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-
		3/21/2014	250	0.360	4.75	7.79	-	-	-	-	-	-	4.8	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/22/2014	5	0.007	0.12	7.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2: Sand and Gravel and Industrial SW Data Summary
Order Item No. 7
Lehigh Southwest Cement Company Permanente Plant
First Quarter 2014

Sample Location	Sample Description	Units Test Method	Flow Rate		Turbidity NTU Field	pH s.u. Field	Chlorine Residual mg/L Field	Temp C Field	DO mg/L Field	Chloride mg/L EPA 300.0			TSS mg/L SM2540D			Total Set Mat mL/L/hr SM2540F			TDS mg/L SM2540C			O&G mg/L EPA 1664			Hardness mg/L SM2340B			Salinity g/kg SM2520B			TOC mg/L SM5310C			
			gpm	MGD						Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result
		Date	Field		Result	Result	Result	Result	Grab	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	
23	Pond 9 Discharge cont.	3/23/2014	30	0.043	2.29	7.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/24/2014	75	0.108	2.99	7.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/25/2014	75	0.108	5.65	7.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/26/2014	1	0.001	0.50	7.79	ND	14.35	6.68	54	0.75	12	-	-	-	ND	0.10	0.10	1200	5.0	10	1.5	0.80	1.4	-	-	-	-	-	-	-	-		
		3/27/2014	75	0.108	3.73	7.55	-	-	-	-	-	-	5.4	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/29/2014	5	0.007	0.86	7.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/30/2014	15	0.022	2.09	7.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/31/2014	1000	1.440	73	7.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
24	Pond 13 DS RW	2/27/2014	-	-	45.49	7.63	-	14.50	6.56	45	0.60	10	-	-	-	-	-	-	1000	5.0	10	-	-	-	548	1	5	ND	2.0	2.0	-	-	-	
27	Pond 13A Discharge into Pond 13B	2/27/2014	3	0.004	833.8	7.99	ND	16.44	8.90	36	0.75	12	28	0.30	0.50	ND	0.10	0.10	1200	5.0	10	ND	0.80	1.4	-	-	-	-	-	-	-	-	-	
		2/28/2014	10	0.014	74.0	8.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/1/2014	3	0.004	49.5	8.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
28	DS Pond 4a, inflow to Pond 13	3/6/2014	-	-	1.02	8.18	-	16.35	9.17	15	0.75	12	-	-	-	-	-	-	1100	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/13/2014	-	-	1.41	8.14	-	15.96	7.84	13	0.15	2.5	-	-	-	-	-	-	950	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/20/2014	-	-	0.91	8.22	-	17.02	7.83	13	0.60	10	-	-	-	-	-	-	1100	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/26/2014	-	-	0.30	8.28	-	17.02	7.52	14	0.60	10	-	-	-	-	-	-	1000	5.0	10	-	-	-	617	1	5	ND	2.0	2.0	-	-	-	
31	Pond 4A Discharge	2/28/2014	3	0.004	1.67	8.56	ND	13.55	10.00	74	0.15	2.5	1.7	0.30	0.50	ND	0.10	0.10	900	5.0	10	ND	0.80	1.4	-	-	-	-	-	-	-	-	-	
		3/1/2014	635	0.914	2.52	8.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/2/2014	610	0.878	3.92	7.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/3/2014	537	0.773	14.26	8.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/4/2014	485	0.698	6.41	7.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/5/2014	511	0.736	3.76	8.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/6/2014	545	0.785	1.71	8.01	ND	21.77	6.76	13	0.75	12	-	-	-	ND	0.10	0.10	1000	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/7/2014	544	0.783	1.87	8.10	-	-	-	-	-	-	1.5	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/8/2014	543	0.781	1.73	7.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/9/2014	542	0.781	1.94	7.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/10/2014	596	0.858	2.53	7.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/11/2014	531	0.765	1.62	8.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/12/2014	541	0.779	2.23	7.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/13/2014	550	0.792	2.8	7.95	ND	21.63	8.24	12	0.15	2.5	-	-	-	ND	0.10	0.10	970	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/14/2014	548	0.790	1.57	8.09	-	-	9.93	-	-	-	3.6	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/15/2014	548	0.789	1.37	7.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/16/2014	548	0.789	0.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/17/2014	625	0.900	0.78	7.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/18/2014	735	1.059	2.21	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/19/2014	738	1.063	1.03	7.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/20/2014	703	1.012	1.41	7.92	ND	20.57	6.65	13	0.60	10	-	-	-	ND	0.10	0.10	1000	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	-
		3/21/2014	702	1.011	1.46	7.98	-	-	-	-	-	-	ND	0.30	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/22/2014	702	1.010	0.92	8.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/23/2014	701	1.010	1.83	7.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/24/2014	680	0.980	1.39	8.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/25/2014	634	0.914	1.04	8.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		3/26/2014	653	0.941	0.62	7.98	ND	20.90	9.02	-	-	-	-	-	-	-	-	-	-	-	-	1.2 J	0.80	1.4	-	-	-	-	-	-	-	-	-	
		3/27/2014	674	0.971	0.99	8.03	-	-	7.18	13	0.15	2.5	0.84	0.30	0.50	ND	0.10	0.10	1000	5.0	10	-	-	-	-	-	-	-	-	-	-	-	-	
		3/28/2014	618	0.890	0.95	7.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 2: Sand and Gravel and Industrial SW Data Summary
Order Item No. 7
Lehigh Southwest Cement Company Permanente Plant
First Quarter 2014

Sample Location	Sample Description	Units Test Method	Flow Rate		Turbidity NTU Field	pH s.u. Field	Chlorine Residual mg/L Field	Temp C Field	DO mg/L Field	Chloride mg/L EPA 300.0			TSS mg/L SM2540D			Total Set Mat mL/L/hr SM2540F			TDS mg/L SM2540C			O&G mg/L EPA 1664			Hardness mg/L SM2340B			Salinity g/kg SM2520B			TOC mg/L SM5310C		
			gpm	MGD																													
		Date	Field	Result	Result	Result	Result	Grab	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	Result	MDL	RL	
31	Pond 4A Discharge	3/29/2014	603	0.868	1.09	7.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/30/2014	602	0.867	0.82	8.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		3/31/2014	665	0.958	2.16	7.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Notes:
All samples are grab samples, except for TSS samples for Ponds 4a, 9, and 17, which are 24-hr composites for TSS.
The date listed for 24-hour composites is when sampling was finished.
J = Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
ND = Analyte not detected at or above the reporting limit.
^ Lab blank contained trace amount of this analyte.
* Analysis exceeded sampling holding time limit.
Only days are shown for when discharges occurred.

Table 3: PP13 Metals Summary
Order Item No. 7
Lehigh Southwest Cement Company Permanente Plant
1st Quarter 2014

Sample Location	Sample Number	Sample Date	Antimony (ug/L)				Arsenic (ug/L)				Beryllium (ug/L)				Cadmium (ug/L)				Copper (ug/L)			
			1638				1638 DRC				1638				1638				1638			
			Result	MDL	RL	Qualifier	Result	MDL	RL	Qualifier	Result	MDL	RL	Qualifier	Result	MDL	RL	Qualifier	Result	MDL	RL	Qualifier
Downstream Location	1	2/6/14	0.512	0.011	0.042	-	1.01	0.047	0.158	-	ND	0.053	0.158	U	0.110	0.007	0.021	-	4.40	0.042	0.126	F
Duplicate (downstream)	1	2/6/14	0.519	0.011	0.042	-	1.06	0.047	0.158	-	ND	0.053	0.158	U	0.112	0.007	0.021	-	4.11	0.042	0.126	F
Pond 30	6	2/27/14	0.505	0.011	0.042	-	1.93	0.009	0.032	-	ND	0.053	0.158	U	0.134	0.007	0.021	-	7.47	0.042	0.126	F
Pond 21	10	2/6/14	0.523	0.011	0.042	-	2.27	0.047	0.158	-	0.119	0.053	0.158	B	0.599	0.007	0.021	-	15.3	0.042	0.126	F
Pond 20	11	2/6/14	0.858	0.011	0.042	-	3.44	0.047	0.158	-	0.196	0.053	0.158	-	0.901	0.007	0.021	-	23.3	0.042	0.126	F
Pond 17 DS RW	15	2/6/14	0.873	0.011	0.042	-	1.10	0.047	0.158	-	ND	0.053	0.158	U	0.178	0.007	0.021	-	6.23	0.042	0.126	F
Pond 17	17	2/6/14	1.91	0.011	0.042	-	0.606	0.047	0.158	-	ND	0.053	0.158	U	0.221	0.007	0.021	-	4.77	0.042	0.126	F
Pond 9 DS RW	20	2/6/14	0.655	0.011	0.042	-	1.69	0.047	0.158	-	ND	0.053	0.158	U	0.264	0.007	0.021	-	10.2	0.042	0.126	F
Pond 9	23	2/6/14	0.708	0.011	0.042	-	2.03	0.047	0.158	-	0.070	0.053	0.158	B	0.312	0.007	0.021	-	11.5	0.042	0.126	F
Pond 13 DS RW	24	2/27/14	0.664	0.011	0.042	-	1.40	0.009	0.032	-	ND	0.053	0.158	U	0.134	0.007	0.021	-	4.48	0.042	0.126	-
Pond 13 A/B	27	2/27/14	0.779	0.011	0.042	-	0.705	0.009	0.032	-	ND	0.053	0.158	U	0.094	0.007	0.021	-	5.64	0.042	0.126	-
DS Pond 4A, inflow to Pond 13	28	3/6/14	3.11	0.011	0.042	-	0.521	0.009	0.032	-	ND	0.053	0.158	U	0.522	0.007	0.021	-	1.33	0.042	0.126	F
Pond 4A	31	3/6/14	5.68	0.011	0.042	-	1.63	0.009	0.032	-	ND	0.053	0.158	U	1.31	0.007	0.021	-	1.63	0.042	0.126	F

Sample Location	Sample Number	Sample Date	Chromium (ug/L)				Hexachrome (mg/L)				Lead (ug/L)				Mercury (ng/L)				Nickel (ug/L)			
			1638 DRC				SM3500-Cr B				1638				1631E				1638 DRC			
			Result	MDL	RL	Qualifier	Result	MDL	RL	Qualifier	Result	MDL	RL	Qualifier	Result	MDL	RL	Qualifier	Result	MDL	RL	Qualifier
Downstream Location	1	2/6/14	5.78	0.158	0.474	Ft	ND	0.0050	0.010	-	0.305	0.006	0.026	F	23.2	2.00	5.000	-	13.5	0.526	2.11	-
Duplicate (downstream)	1	2/6/14	5.81	0.158	0.474	Ft	ND	0.0050	0.010	-	0.281	0.006	0.026	F	23.7	2.00	5.00	-	4.11	0.526	2.11	-
Pond 30	6	2/27/14	11.1	0.009	0.032	Ft	ND	0.0050	0.010	-	0.300	0.006	0.026	F	22.4	0.200	0.500		15.0	0.053	0.211	-
Pond 21	10	2/6/14	47.3	0.158	0.474	Ft	0.016	0.0050	0.010	-	3.11	0.006	0.026	F	161	2.00	5.00	-	45.5	0.526	2.11	-
Pond 20	11	2/6/14	78.6	0.158	0.474	Ft	0.034	0.0050	0.010	-	4.75	0.006	0.026	F	331	2.00	5.00	-	69.4	0.526	2.11	-
Pond 17 DS RW	15	2/6/14	10.6	0.158	0.474	Ft	0.0060	0.0050	0.010	J	0.394	0.006	0.026	F	149	2.00	5.00	-	16.7	0.526	2.11	-
Pond 17	17	2/6/14	3.53	0.158	0.474	Ft	ND	0.0050	0.010	-	0.124	0.006	0.026	F	17.1	0.200	0.500	-	25.6	0.526	2.11	-
Pond 9 DS RW	20	2/6/14	17.3	0.158	0.474	Ft	ND	0.0050	0.010	-	0.901	0.006	0.026	F	350	2.00	5.00	-	21.8	0.526	2.11	-
Pond 9	23	2/6/14	20.2	0.158	0.474	Ft	0.0060	0.0050	0.010	J	1.08	0.006	0.026	F	400	2.00	5.00	-	25.5	0.526	2.11	-
Pond 13 DS RW	24	2/27/14	2.81	0.009	0.032	-	ND	0.0050	0.010	-	0.367	0.006	0.026	-	23.0	0.200	0.500	-	13.0	0.053	0.211	-
Pond 13 A/B	27	2/27/14	3.43	0.009	0.032	-	-	-	-	-	0.644	0.006	0.026	-	19.7	0.200	0.500	-	7.37	0.053	0.211	-
Pond 13 A/B	27	2/28/14	-	-	-	-	ND	0.0050	0.010	-	-	-	-	-	-	-	-	-	-	-	-	-
DS Pond 4A, inflow to Pond 13	28	3/6/14	0.262	0.009	0.032	F	ND	0.0050	0.010	-	0.035	0.006	0.026	F	1.82	0.200	0.500	-	17.1	0.053	0.211	-
Pond 4A	31	3/6/14	0.265	0.009	0.032	F	ND	0.0050	0.010	-	0.047	0.006	0.026	F	1.30	0.200	0.500	-	59.4	0.053	0.211	-

Notes:

All locations were grab samples collected via "clean hands/dirty hands" EPA sampling method to the extent practicable

B = Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.

DS RW = downstream receiving water

J = Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

Ft = Analyte detected at trace concentration in field blank.

F = Analyte detected above the RL in field blank.

MDL = Method detection limit

ND = Not detected at or above the indicated MDL or RL.

mg/L = milligrams per liter

ng/L = nanograms per liter

RL = Reporting limit

U = Result is ≤ the method detection limit.

ug/L = micrograms per liter

Table 3: PP13 Metals Summary
Order Item No. 7
Lehigh Southwest Cement Company Permanente Plant
1st Quarter 2014

Sample Location	Sample Number	Sample Date	Selenium (ug/L)				Silver (ug/L)				Thallium (ug/L)				Zinc (ug/L)			
			1638 DRC				1638				1638				1638			
			Result	MDL	RL	Qualifier	Result	MDL	RL	Qualifier	Result	MDL	RL	Qualifier	Result	MDL	RL	Qualifier
Downstream Location	1	2/6/14	6.49	0.105	0.316	-	0.009	0.005	0.021	B	0.117	0.003	0.011	-	9.19	0.06	0.21	F
	Dup	1	2/6/14	6.42	0.105	0.316	-	0.007	0.005	0.021	B	0.111	0.003	0.011	-	8.91	0.06	0.21
Pond 30	6	2/27/14	14.6	0.021	0.063	-	0.011	0.005	0.021	B	0.068	0.003	0.011	-	18.9	0.06	0.21	F
Pond 21	10	2/6/14	4.94	0.105	0.316	-	0.087	0.005	0.021	-	0.451	0.003	0.011	-	56.7	0.06	0.21	F
Pond 20	11	2/6/14	9.11	0.105	0.316	-	0.133	0.005	0.021	-	0.741	0.003	0.011	-	90.6	0.06	0.21	F
Pond 17 DS RW	15	2/6/14	11.4	0.105	0.316	-	0.016	0.005	0.021	B	0.397	0.003	0.011	-	15.7	0.06	0.21	F
Pond 17	17	2/6/14	27.6	0.105	0.316	-	0.012	0.005	0.021	B	0.318	0.003	0.011	-	12.1	0.06	0.21	F
Pond 9 DS RW	20	2/6/14	7.31	0.105	0.316	-	0.034	0.005	0.021	-	0.599	0.003	0.011	-	28.2	0.06	0.21	F
Pond 9	23	2/6/14	7.71	0.105	0.316	-	0.044	0.005	0.021	-	0.618	0.003	0.011	-	33.2	0.06	0.21	F
Pond 13 DS RW	24	2/27/14	15.5	0.021	0.063	-	0.009	0.005	0.021	B	0.033	0.003	0.011	-	5.49	0.06	0.21	-
Pond 13 A/B	27	2/27/14	22.8	0.021	0.063	-	0.011	0.005	0.021	B	0.041	0.003	0.011	-	9.01	0.06	0.21	-
DS Pond 4A, inflow to Pond 13	28	3/6/14	44.2	0.021	0.063	-	ND	0.005	0.021	U	0.043	0.003	0.011	-	2.60	0.06	0.21	F
Pond 4A	31	3/6/14	33.8	0.021	0.063	-	ND	0.005	0.021	U	0.174	0.003	0.011	-	56.8	0.06	0.21	F

Notes:

All locations were grab samples collected via "clean hands/dirty hands" EPA sampling method to the extent practicable

B = Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.

DS RW = downstream receiving water

J = Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

Ft = Analyte detected at trace concentration in field blank.

F = Analyte detected above the RL in field blank.

MDL = Method detection limit

ND = Not detected at or above the indicated MDL or RL.

mg/L = milligrams per liter

ng/L = nanograms per liter

RL = Reporting limit

U = Result is ≤ the method detection limit.

ug/L = micrograms per liter

FIGURES

Map Document: G:\GIS\Sites\Lehigh_Permanente_Quarry\Maps\SurfaceWater\WaterOrderResponse\SamplingLocations_Item7_Overview_201310.mxd / Modified 10/18/2013 2:01:02 PM by DZelmanfahm / Exported 10/30/2013 4:34:06 PM by DZelmanfahm



LEGEND

Item 7 Sample Locations

- Sand and Gravel Discharge Point
- General Industrial Stormwater Discharge Point
- Receiving Water Sample Location
- Supplemental Monitoring Location

— Permanente Creek

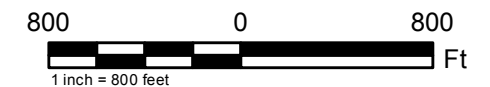
Pond

NOTES

RW = Receiving Water
DS = Downstream

REFERENCES

- 1) Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
- 2) On site ponds, wetlands, and stream data compiled from WRA, Lehigh, and Golder Associates. Off site hydrography from USGS NHD.
- 3) Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet



PROJECT LEHIGH SOUTHWEST CEMENT COMPANY
PERMANENTE QUARRY

TITLE

ITEM 7 SAMPLE LOCATIONS



PROJECT No.		063-7109-913	FILE No. SamplingLocations_Item7_Overview_201310.mxd	
DESIGN	DZF	10/18/2013	SCALE:	1:9,600
GIS	DZF	10/18/2013	REV.	0
CHECK	GW	10/18/2013	FIGURE 1	
REVIEW	XX	10/18/2013		

LABORATORY ANALYTICAL RESULTS



alpha

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ELAP Certificate Numbers 1551 and 2728

13 January 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14A0083

Enclosed are the results of analyses for samples received by the laboratory on 01/02/14 22:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/13/14 13:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 EFFM-002	14A0083-01	Water	01/02/14 11:30	01/02/14 22:20
Pond 9UP R-001B	14A0083-02	Water	01/02/14 11:40	01/02/14 22:20
Pond 9DN R-002B	14A0083-03	Water	01/02/14 11:45	01/02/14 22:20



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/13/14 13:52

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 EFFM-002 (14A0083-01) Water	Sampled: 01/02/14 11:30	Received: 01/02/14 22:20								
Total Dissolved Solids	1200	5.0	10	mg/l	1	AA40632	01/06/14 15:45	01/09/14 12:45	SM2540C	U
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AA40323	01/03/14 13:00	01/03/14 17:00	SM2540F	
Pond 9UP R-001B (14A0083-02) Water	Sampled: 01/02/14 11:40	Received: 01/02/14 22:20								
Total Dissolved Solids	1200	5.0	10	mg/l	1	AA40632	01/06/14 15:45	01/09/14 12:45	SM2540C	
Pond 9DN R-002B (14A0083-03) Water	Sampled: 01/02/14 11:45	Received: 01/02/14 22:20								
Total Dissolved Solids	1500	5.0	10	mg/l	1	AA40632	01/06/14 15:45	01/09/14 12:45	SM2540C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/13/14 13:52

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 EFFM-002 (14A0083-01) Water	Sampled: 01/02/14 11:30	Received: 01/02/14 22:20								
Chloride	77	0.75	12	mg/l	25	AA40312	01/03/14 09:16	01/06/14 23:19	EPA 300.0	
Pond 9UP R-001B (14A0083-02) Water	Sampled: 01/02/14 11:40	Received: 01/02/14 22:20								
Chloride	130	0.75	12	mg/l	25	AA40312	01/03/14 09:16	01/07/14 00:05	EPA 300.0	
Pond 9DN R-002B (14A0083-03) Water	Sampled: 01/02/14 11:45	Received: 01/02/14 22:20								
Chloride	82	0.75	12	mg/l	25	AA40312	01/03/14 09:16	01/07/14 00:20	EPA 300.0	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/13/14 13:52

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

Batch AA40632 - General Preparation

Blank (AA40632-BLK1)

Prepared: 01/06/14 Analyzed: 01/09/14

Total Dissolved Solids	ND	5.0	10	mg/l						U
------------------------	----	-----	----	------	--	--	--	--	--	---

Duplicate (AA40632-DUP1)

Source: 14A0083-01

Prepared: 01/06/14 Analyzed: 01/09/14

Total Dissolved Solids	1220	5.0	10	mg/l		1230		0.982	30	
------------------------	------	-----	----	------	--	------	--	-------	----	--

Duplicate (AA40632-DUP2)

Source: 14A0083-02

Prepared: 01/06/14 Analyzed: 01/09/14

Total Dissolved Solids	1180	5.0	10	mg/l		1240		5.30	30	
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Lehigh Southwest Cement Company
 Dallas TX, 75266-0140
 PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
 Project: Lehigh S & G Permit
 Project Number: 063-7109-914

Reported:
 01/13/14 13:52

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AA40312 - General Preparation											
Blank (AA40312-BLK1)						Prepared & Analyzed: 01/03/14					
Chloride	ND	0.030	0.50	mg/l							U
LCS (AA40312-BS1)						Prepared & Analyzed: 01/03/14					
Chloride	11.5	0.030	0.50	mg/l	11.1		103	90-110			
Duplicate (AA40312-DUP1)						Source: 14A0086-01 Prepared: 01/03/14 Analyzed: 01/06/14					
Chloride	51.9	0.15	2.5	mg/l		51.9			0.0867	20	
Matrix Spike (AA40312-MS1)						Source: 14A0086-01 Prepared: 01/03/14 Analyzed: 01/06/14					
Chloride	61.2	0.15	2.5	mg/l	11.1	51.9	83.7	80-120			
Matrix Spike (AA40312-MS2)						Source: 14A0073-01 Prepared: 01/03/14 Analyzed: 01/06/14					
Chloride	38.4	0.060	1.0	mg/l	11.1	27.9	95.2	80-120			
Matrix Spike Dup (AA40312-MSD1)						Source: 14A0086-01 Prepared: 01/03/14 Analyzed: 01/06/14					
Chloride	62.3	0.15	2.5	mg/l	11.1	51.9	93.7	80-120	1.80	20	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/13/14 13:52

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

14A0083

Golder Associates CHAIN OF CUSTODY



Page 1 of 1
Quotation No. Invoice Lehigh

PROJECT NO.:		SITE NAME:		ANALYSES		EDD required?		EDF required?	
063-7109-914		Lehigh S&S permit		SS, TSS, Chloride		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
SAMPLER(S):		CONTRACT LABORATORY:		Container Info					
David Walter (printed)		Alpha		Type/Vol.					
		TURN-AROUND TIME:		Filter					
		Standard		Preserv.					
Sample I.D.	Lab I.D.	Collection Date	Time	Matrix	Depth	Cont. Qty.	Remarks		
Pond 9 Eff m-002		1-2-14	1130	W		1	Include J-Flags		
Pond 9 4P R-001B			1140			1			
Pond 9 DN R-002B			1145			1			
<div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished by: (signature)</p> <p>David Walter</p> </div> <div> <p>Received by: (signature)</p> <p>David Walter</p> </div> </div>									
<div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished by: (signature)</p> <p>David Walter</p> </div> <div> <p>Received by: (signature)</p> <p>David Walter</p> </div> </div>									
<div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished by: (signature)</p> <p>David Walter</p> </div> <div> <p>Received by: (signature)</p> <p>David Walter</p> </div> </div>									

SEND RESULTS TO:
Attn: George Wegmann, Greg Knapp,
Chow Yip
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

Date/Time: 1-2-14 1440
Date/Time: 1-2-14 1240
Date/Time: 1-2-14 1930
Date/Time: 1-2-14 2220



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ELAP Certificate Numbers 1551 and 2728

21 January 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14A0239

Enclosed are the results of analyses for samples received by the laboratory on 01/06/14 21:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 / Composite Lehigh S & G Permit

Reported:

01/21/14 16:38

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 Composite	14A0239-01	Water	01/03/14 13:10	01/06/14 21:45
Pond 17 Eff M-004	14A0239-02	Water	01/03/14 13:35	01/06/14 21:45
Pond 17DN R-002D	14A0239-03	Water	01/03/14 13:50	01/06/14 21:45



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 / Composite Lehigh S & G Permit

Reported:

01/21/14 16:38

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 Composite (14A0239-01) Water	Sampled: 01/03/14 13:10	Received: 01/06/14 21:45								
Total Suspended Solids	2.4	0.30	0.50	mg/l	1	AA40635	01/07/14 11:00	01/10/14 14:50	SM2540D	
Pond 17 Eff M-004 (14A0239-02) Water	Sampled: 01/03/14 13:35	Received: 01/06/14 21:45								
Total Dissolved Solids	1800	5.0	10	mg/l	1	AA40723	01/07/14 13:00	01/09/14 16:15	SM2540C	
Total Suspended Solids	5.2	0.30	0.50	"	"	AA40635	01/07/14 11:00	01/10/14 14:50	SM2540D	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AA40736	01/07/14 13:00	01/07/14 17:00	SM2540F	T-2, U
Pond 17DN R-002D (14A0239-03) Water	Sampled: 01/03/14 13:50	Received: 01/06/14 21:45								
Total Dissolved Solids	1700	5.0	10	mg/l	1	AA40723	01/07/14 13:00	01/09/14 16:15	SM2540C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 / Composite Lehigh S & G Permit

Reported:

01/21/14 16:38

Anions by EPA Method 300.0

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 17 Eff M-004 (14A0239-02) Water Sampled: 01/03/14 13:35 Received: 01/06/14 21:45											
Chloride	91	0.75	12	mg/l	25	AA40727	01/07/14 11:50	01/07/14 18:18	EPA 300.0		
Pond 17DN R-002D (14A0239-03) Water Sampled: 01/03/14 13:50 Received: 01/06/14 21:45											
Chloride	91	0.75	12	mg/l	25	AA40727	01/07/14 11:50	01/07/14 18:33	EPA 300.0		



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 / Composite Lehigh S & G Permit

Reported:

01/21/14 16:38

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AA40635 - General Preparation

Blank (AA40635-BLK1)

Prepared: 01/06/14 Analyzed: 01/10/14

Total Suspended Solids	ND	0.30	0.50	mg/l							U
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Duplicate (AA40635-DUP1)

Source: 14A0123-01

Prepared: 01/06/14 Analyzed: 01/10/14

Total Suspended Solids	187	0.30	0.50	mg/l		213			13.4	30	
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Duplicate (AA40635-DUP2)

Source: 14A0213-01

Prepared: 01/06/14 Analyzed: 01/10/14

Total Suspended Solids	416	0.30	0.50	mg/l		452			8.29	30	
------------------------	-----	------	------	------	--	-----	--	--	------	----	--

Batch AA40723 - General Preparation

Blank (AA40723-BLK1)

Prepared: 01/07/14 Analyzed: 01/09/14

Total Dissolved Solids	ND	5.0	10	mg/l							U
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Duplicate (AA40723-DUP1)

Source: 14A0226-01

Prepared: 01/07/14 Analyzed: 01/09/14

Total Dissolved Solids	580	5.0	10	mg/l		648			11.1	30	
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Duplicate (AA40723-DUP2)

Source: 14A0258-02

Prepared: 01/07/14 Analyzed: 01/09/14

Total Dissolved Solids	904	5.0	10	mg/l		908			0.442	30	
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Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 / Composite Lehigh S & G Permit

Reported:

01/21/14 16:38

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AA40727 - General Preparation											
Blank (AA40727-BLK1)						Prepared & Analyzed: 01/07/14					
Chloride	ND	0.030	0.50	mg/l							U
LCS (AA40727-BS1)						Prepared & Analyzed: 01/07/14					
Chloride	11.4	0.030	0.50	mg/l	11.1		103	90-110			
Duplicate (AA40727-DUP1)						Source: 14A0180-02 Prepared & Analyzed: 01/07/14					
Chloride	50.6	0.15	2.5	mg/l		51.1			1.09	20	
Matrix Spike (AA40727-MS1)						Source: 14A0180-02 Prepared & Analyzed: 01/07/14					
Chloride	62.4	0.15	2.5	mg/l	11.1	51.1	102	80-120			
Matrix Spike (AA40727-MS2)						Source: 14A0255-02 Prepared & Analyzed: 01/07/14					
Chloride	15.5	0.060	1.0	mg/l	11.1	4.62	98.1	80-120			
Matrix Spike Dup (AA40727-MSD1)						Source: 14A0180-02 Prepared & Analyzed: 01/07/14					
Chloride	62.5	0.15	2.5	mg/l	11.1	51.1	102	80-120	0.0979	20	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 / Composite Lehigh S & G Permit

Reported:

01/21/14 16:38

Notes and Definitions

T-2 Sample analyzed outside of recommended holding time per client.

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

14A0239

Golder Associates **CHAIN OF CUSTODY**

Page 1 of 1
Quotation No. Invoice Lehigh



PROJECT NO.:		SITE NAME:		ANALYSES		EDD required?					
063-7104-914		Composite		Lehigh St & G permit		Yes No					
SAMPLER(S):		David C. Walt		TSS		EDF required?					
David Walter (printed)		David C. Walt (signature)		SS, TSS, Chloride		Yes No					
CONTRACT LABORATORY:		Alpha		TSS, Chloride							
TURN-AROUND TIME:		Standard									
Sample I.D.	Lab I.D.	Collection		Matrix	Depth	Type/Vol.	Filter	Preserv.	Container Info	Cont. Qty.	Remarks
		Date	Time								
Pond 9 Composite		1-3-14	1316	W		1L	12g	1L		1	Include J-flags
Pond 17 Eff M-004		1335				N	N	N		2	24 hr composite
Pond 170M R-0030		1350				N	N	N		1	Grab
											Settleable Solids set up out of hold. OK to run per George 1-8-14

Relinquished by: (signature)		Received by: (signature)		Date/Time		SEND RESULTS TO:	
David C. Walt		[Signature]		1-3-14 1440		Attn: George Wegmann, Greg Knapp, Chow PIP	
[Signature]		[Signature]		1/3/14 1600		Golder Associates Inc.	
[Signature]		[Signature]		1-3-14 2145		425 Lakeside Drive	
						Sunnyvale, CA 94085	
						Phone (408) 220-9223	
						Fax (408) 220-9224	



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ELAP Certificate Numbers 1551 and 2728

22 January 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14A0558

Enclosed are the results of analyses for samples received by the laboratory on 01/09/14 22:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: Weekly Sampling/ 063-7109-914

Reported:

01/22/14 09:12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 EFF M-002	14A0558-01	Water	01/09/14 11:35	01/09/14 22:10
Pond 9 UP R-001B	14A0558-02	Water	01/09/14 11:45	01/09/14 22:10
Pond 9 DN R-002B	14A0558-03	Water	01/09/14 11:55	01/09/14 22:10
Pond 17 EFF M-004	14A0558-04	Water	01/09/14 12:15	01/09/14 22:10
Pond 17 DN R-002D	14A0558-05	Water	01/09/14 12:25	01/09/14 22:10



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: Weekly Sampling/ 063-7109-914

Reported:

01/22/14 09:12

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 EFF M-002 (14A0558-01) Water	Sampled: 01/09/14 11:35	Received: 01/09/14 22:10								
Total Dissolved Solids	1100	5.0	10	mg/l	1	AA41325	01/13/14 09:00	01/15/14 14:00	SM2540C	U
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AA41028	01/10/14 13:00	01/10/14 17:00	SM2540F	
Pond 9 UP R-001B (14A0558-02) Water	Sampled: 01/09/14 11:45	Received: 01/09/14 22:10								
Total Dissolved Solids	1400	5.0	10	mg/l	1	AA41325	01/13/14 09:00	01/15/14 14:00	SM2540C	
Pond 9 DN R-002B (14A0558-03) Water	Sampled: 01/09/14 11:55	Received: 01/09/14 22:10								
Total Dissolved Solids	1200	5.0	10	mg/l	1	AA41325	01/13/14 09:00	01/15/14 14:00	SM2540C	
Pond 17 EFF M-004 (14A0558-04) Water	Sampled: 01/09/14 12:15	Received: 01/09/14 22:10								
Total Dissolved Solids	1600	5.0	10	mg/l	1	AA41325	01/13/14 09:00	01/15/14 14:00	SM2540C	U
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AA41028	01/10/14 13:00	01/10/14 17:00	SM2540F	
Pond 17 DN R-002D (14A0558-05) Water	Sampled: 01/09/14 12:25	Received: 01/09/14 22:10								
Total Dissolved Solids	1600	5.0	10	mg/l	1	AA41325	01/13/14 09:00	01/15/14 14:00	SM2540C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: Weekly Sampling/ 063-7109-914

Reported:

01/22/14 09:12

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 EFF M-002 (14A0558-01) Water Sampled: 01/09/14 11:35 Received: 01/09/14 22:10										
Chloride	73	0.75	12	mg/l	25	AA41359	01/13/14 15:56	01/14/14 00:47	EPA 300.0	
Pond 9 UP R-001B (14A0558-02) Water Sampled: 01/09/14 11:45 Received: 01/09/14 22:10										
Chloride	130	0.75	12	mg/l	25	AA41359	01/13/14 15:56	01/14/14 01:02	EPA 300.0	
Pond 9 DN R-002B (14A0558-03) Water Sampled: 01/09/14 11:55 Received: 01/09/14 22:10										
Chloride	93	0.75	12	mg/l	25	AA41359	01/13/14 15:56	01/14/14 01:17	EPA 300.0	
Pond 17 EFF M-004 (14A0558-04) Water Sampled: 01/09/14 12:15 Received: 01/09/14 22:10										
Chloride	110	0.75	12	mg/l	25	AA41359	01/13/14 15:56	01/14/14 01:33	EPA 300.0	
Pond 17 DN R-002D (14A0558-05) Water Sampled: 01/09/14 12:25 Received: 01/09/14 22:10										
Chloride	100	0.75	12	mg/l	25	AA41359	01/13/14 15:56	01/14/14 01:48	EPA 300.0	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: Weekly Sampling/ 063-7109-914

Reported:

01/22/14 09:12

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AA41325 - General Preparation

Blank (AA41325-BLK1)

Prepared: 01/13/14 Analyzed: 01/15/14

Total Dissolved Solids	ND	5.0	10	mg/l						U
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Duplicate (AA41325-DUP1)

Source: 14A0558-05

Prepared: 01/13/14 Analyzed: 01/15/14

Total Dissolved Solids	1620	5.0	10	mg/l		1590		1.75	30	
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Duplicate (AA41325-DUP2)

Source: 14A0592-02

Prepared: 01/13/14 Analyzed: 01/15/14

Total Dissolved Solids	228	5.0	10	mg/l		210		8.22	30	
------------------------	-----	-----	----	------	--	-----	--	------	----	--



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: Weekly Sampling/ 063-7109-914

Reported:

01/22/14 09:12

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AA41359 - General Preparation

Blank (AA41359-BLK1)

Prepared & Analyzed: 01/13/14

Chloride	ND	0.030	0.50	mg/l							U
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LCS (AA41359-BS1)

Prepared & Analyzed: 01/13/14

Chloride	11.1	0.030	0.50	mg/l	11.1		99.9	90-110			
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Duplicate (AA41359-DUP1)

Source: 14A0656-01

Prepared & Analyzed: 01/13/14

Chloride	15.1	0.030	0.50	mg/l		15.1			0.106	20	
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Matrix Spike (AA41359-MS1)

Source: 14A0656-01

Prepared & Analyzed: 01/13/14

Chloride	24.7	0.15	2.5	mg/l	11.1	15.1	86.4	80-120			
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Matrix Spike (AA41359-MS2)

Source: 14A0481-02

Prepared: 01/13/14 Analyzed: 01/14/14

Chloride	34.7	0.15	2.5	mg/l	11.1	23.9	96.8	80-120			
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Matrix Spike Dup (AA41359-MSD1)

Source: 14A0656-01

Prepared & Analyzed: 01/13/14

Chloride	24.7	0.15	2.5	mg/l	11.1	15.1	86.5	80-120	0.0675	20	
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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: Weekly Sampling/ 063-7109-914

Reported:

01/22/14 09:12

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates
CHAIN OF CUSTODY

14A0558

Page 1 of 1
Quotation No. Invoice Lehigh

PROJECT NO.:		SITE NAME:		ANALYSES					
063-7109-914		Weekly sampling Lehigh St & G permit		TDS, chloride Cu, TDS, chloride					
SAMPLER(S): David Walter (printed)		David C. Walt (signature)							
CONTRACT LABORATORY:		Alpha							
TURN-AROUND TIME:		Standard							
Sample I.D.	Lab I.D.	Collection		Depth	Type/Vol.	Filter	Preserv.	Cont. Qty.	Remarks
		Date	Time						
Pond 9 EFF M-002	1-9-14	1135	W		1			1	Include J-flags
Pond 9 UP R-001B	1-9-14	1145			1			1	
Pond 9 DN R-002B	1-9-14	1155			1			1	
Pond 17 EFF M-004	1-9-14	1215			1			1	
Pond 17 DN R-002D	1-9-14	1225			1			1	
SEND RESULTS TO:									
Relinquished by (signature): David C. Walt		Received by (signature): Jim John		Date/Time: 1-9-14 1315/4:20		SEND RESULTS TO:			
Relinquished by (signature): Jim John		Received by (signature): [signature]		Date/Time: 1-9-14 1405		Attn: George Wegmann, Greg Knapp, Chow Yip			
Relinquished by (signature): [signature]		Received by (signature): [signature]		Date/Time: 1-9-14 2010		Golder Associates Inc. 425 Lakeside Drive Sunnyvale, CA 94085 Phone (408) 220-9223 Fax (408) 220-9224			



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ELAP Certificate Numbers 1551 and 2728

21 January 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14A0598

Enclosed are the results of analyses for samples received by the laboratory on 01/13/14 21:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/21/14 11:38

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 Composite	14A0598-01	Water	01/10/14 10:50	01/13/14 21:00
Pond 17 Composite	14A0598-02	Water	01/10/14 11:10	01/13/14 21:00



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/21/14 11:38

Conventional Chemistry Parameters by APHA/EPA Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 Composite (14A0598-01) Water Sampled: 01/10/14 10:50 Received: 01/13/14 21:00										
Total Suspended Solids	2.8	0.30	0.50	mg/l	1	AA41355	01/14/14 12:30	01/20/14 10:16	SM2540D	
Pond 17 Composite (14A0598-02) Water Sampled: 01/10/14 11:10 Received: 01/13/14 21:00										
Total Suspended Solids	8.7	0.30	0.50	mg/l	1	AA41355	01/14/14 12:30	01/20/14 10:16	SM2540D	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/21/14 11:38

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch AA41355 - General Preparation

Blank (AA41355-BLK1)

Prepared: 01/13/14 Analyzed: 01/20/14

Total Suspended Solids	ND	0.30	0.50	mg/l							U
------------------------	----	------	------	------	--	--	--	--	--	--	---

Duplicate (AA41355-DUP1)

Source: 14A0627-01

Prepared: 01/13/14 Analyzed: 01/20/14

Total Suspended Solids	42.0	0.30	0.50	mg/l		38.0			10.0	30	
------------------------	------	------	------	------	--	------	--	--	------	----	--



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PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/21/14 11:38

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

PROJECT NO.:		SITE NAME:		ANALYSES		EDD required?	
063-7109-914		Lehigh St 6 permit				Yes No	
SAMPLER(S):		CONTRACT LABORATORY:		Container Info		EDF required?	
David Walter		Alpha		Type/Vol.		Yes No	
TURN-AROUND TIME:		standard		Filter			
Sample I.D.		Collection		Depth		Cont. Qty.	
Lab I.D.		Date		Matrix		Remarks	
Pond 9 Composite	1-10-14	1050	W			1	Include J-flags
Pond 17 Composite	1-10-14	1110	W			1	

SEND RESULTS TO:
 Attn: George Wegmann, Greg Knapp
 Chow Kip
 Golder Associates Inc.
 425 Lakeside Drive
 Sunnyvale, CA 94085
 Phone (408) 220-9223
 Fax (408) 220-9224

white tag copy yellowed, rapped file
Ree Warr 1-13-14 21- 1815- 1-13-14 21- 1-13-14 21-



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

ELAP Certificate Numbers 1551 and 2728

30 January 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14A0933

Enclosed are the results of analyses for samples received by the laboratory on 01/15/14 21:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/30/14 09:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 Eff M-002	14A0933-01	Water	01/15/14 11:20	01/15/14 21:00
Pond 9 UP R-001B	14A0933-02	Water	01/15/14 11:30	01/15/14 21:00
Pond 9 DN R-002B	14A0933-03	Water	01/15/14 11:40	01/15/14 21:00
Pond 17 Eff M-004	14A0933-04	Water	01/15/14 12:20	01/15/14 21:00
Pond 17 DN R-002D	14A0933-05	Water	01/15/14 12:35	01/15/14 21:00



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/30/14 09:58

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond 9 Eff M-002 (14A0933-01) Water Sampled: 01/15/14 11:20 Received: 01/15/14 21:00										
Total Dissolved Solids	1300	5.0	10	mg/l	1	AA41707	01/17/14 09:00	01/21/14 13:45	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AA41714	01/16/14 13:00	01/16/14 17:00	SM2540F	U
Pond 9 UP R-001B (14A0933-02) Water Sampled: 01/15/14 11:30 Received: 01/15/14 21:00										
Total Dissolved Solids	1400	5.0	10	mg/l	1	AA41707	01/17/14 09:00	01/21/14 13:45	SM2540C	
Pond 9 DN R-002B (14A0933-03) Water Sampled: 01/15/14 11:40 Received: 01/15/14 21:00										
Total Dissolved Solids	1300	5.0	10	mg/l	1	AA41707	01/17/14 09:00	01/21/14 13:45	SM2540C	
Pond 17 Eff M-004 (14A0933-04) Water Sampled: 01/15/14 12:20 Received: 01/15/14 21:00										
Total Dissolved Solids	1600	5.0	10	mg/l	1	AA41707	01/17/14 09:00	01/21/14 13:45	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AA41714	01/16/14 13:00	01/16/14 17:00	SM2540F	U
Pond 17 DN R-002D (14A0933-05) Water Sampled: 01/15/14 12:35 Received: 01/15/14 21:00										
Total Dissolved Solids	1500	5.0	10	mg/l	1	AA41707	01/17/14 09:00	01/21/14 13:45	SM2540C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
01/30/14 09:58

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 Eff M-002 (14A0933-01) Water Sampled: 01/15/14 11:20 Received: 01/15/14 21:00										
Chloride	75	0.60	10	mg/l	20	AA42038	01/20/14 15:36	01/20/14 23:47	EPA 300.0	
Pond 9 UP R-001B (14A0933-02) Water Sampled: 01/15/14 11:30 Received: 01/15/14 21:00										
Chloride	140	0.75	12	mg/l	25	AA42038	01/20/14 15:36	01/21/14 00:02	EPA 300.0	
Pond 9 DN R-002B (14A0933-03) Water Sampled: 01/15/14 11:40 Received: 01/15/14 21:00										
Chloride	90	0.60	10	mg/l	20	AA42038	01/20/14 15:36	01/21/14 00:17	EPA 300.0	
Pond 17 Eff M-004 (14A0933-04) Water Sampled: 01/15/14 12:20 Received: 01/15/14 21:00										
Chloride	130	0.75	12	mg/l	25	AA42038	01/20/14 15:36	01/21/14 00:32	EPA 300.0	
Pond 17 DN R-002D (14A0933-05) Water Sampled: 01/15/14 12:35 Received: 01/15/14 21:00										
Chloride	120	0.75	12	mg/l	25	AA42038	01/20/14 15:36	01/21/14 00:47	EPA 300.0	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/30/14 09:58

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

Batch AA41707 - General Preparation

Blank (AA41707-BLK1)

Prepared: 01/17/14 Analyzed: 01/21/14

Total Dissolved Solids	ND	5.0	10	mg/l						U
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Duplicate (AA41707-DUP1)

Source: 14A0925-01

Prepared: 01/17/14 Analyzed: 01/21/14

Total Dissolved Solids	301	5.0	10	mg/l		282		6.52	30	
------------------------	-----	-----	----	------	--	-----	--	------	----	--

Duplicate (AA41707-DUP2)

Source: 14A0933-03

Prepared: 01/17/14 Analyzed: 01/21/14

Total Dissolved Solids	1220	5.0	10	mg/l		1330		8.78	30	
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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
01/30/14 09:58

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch AA42038 - General Preparation										
Blank (AA42038-BLK1)					Prepared: 01/20/14 Analyzed: 01/21/14					
Chloride	ND	0.030	0.50	mg/l						U
LCS (AA42038-BS1)					Prepared & Analyzed: 01/20/14					
Chloride	11.0	0.030	0.50	mg/l	11.1		99.0 90-110			
Duplicate (AA42038-DUP1)					Source: 14A1101-03 Prepared: 01/20/14 Analyzed: 01/21/14					
Chloride	58.6	0.30	5.0	mg/l		58.3		0.530	20	
Matrix Spike (AA42038-MS1)					Source: 14A1101-03 Prepared: 01/20/14 Analyzed: 01/21/14					
Chloride	68.3	0.30	5.0	mg/l	11.1	58.3	90.0 80-120			
Matrix Spike (AA42038-MS2)					Source: 14A1126-01 Prepared: 01/20/14 Analyzed: 01/21/14					
Chloride	28.8	0.30	5.0	mg/l	11.1	18.4	94.2 80-120			
Matrix Spike Dup (AA42038-MSD1)					Source: 14A1101-03 Prepared: 01/20/14 Analyzed: 01/21/14					
Chloride	68.2	0.30	5.0	mg/l	11.1	58.3	89.1 80-120	0.146	20	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/30/14 09:58

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates CHAIN OF CUSTODY

14A0933

Page 1 of 1

Quotation No. Invoice Lehigh

PROJECT NO.:		SITE NAME:		ANALYSES		EDD required?		
063-7109-914		Weekly Lehigh S&G permit		TOS, chloride TOS, chloride		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
SAMPLER(S):		David Walther (signature)		David C. Walt (signature)		EDF required?		
CONTRACT LABORATORY:		Alpha		Container Info		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
TURN-AROUND TIME:		Standard						
Sample I.D.	Lab I.D.	Collection		Matrix	Depth	Type/Vol. Filter Preserv.	Cont. Qty.	Remarks
		Date	Time					
Pond 9 Eff M-002	1-15-14	1120	W			1		Include J-flags
Pond 9 UP R-001B	1130					1		
Pond 9 DN R-002B	1140					1		
Pond 17 Eff M-004	1200					1		
Pond 17 DN R-002D	1235					1		

Relinquished by: (signature)	Received by: (signature)	Date/Time:
David C. Walt	Jim Zehm	1-15-14 1432
Jim Zehm	WOW	1-15-14 1820
WOW	WOW	1-15-14 2100

SEND RESULTS TO:
Attn: George Wegmann, Greg Knapp, Chow Yip
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224



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ELAP Certificate Numbers 1551 and 2728

03 February 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14A1018

Enclosed are the results of analyses for samples received by the laboratory on 01/16/14 21:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/30/14 11:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 Composite	14A1018-01	Water	01/16/14 10:45	01/16/14 21:35
Pond 17 Composite	14A1018-02	Water	01/16/14 11:10	01/16/14 21:35



Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/30/14 11:36

Conventional Chemistry Parameters by APHA/EPA Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 9 Composite (14A1018-01) Water Sampled: 01/16/14 10:45 Received: 01/16/14 21:35											
Total Suspended Solids	3.4	0.30	0.50	mg/l	1	AA42245	01/22/14 14:48	01/28/14 10:50	SM2540D		
Pond 17 Composite (14A1018-02) Water Sampled: 01/16/14 11:10 Received: 01/16/14 21:35											
Total Suspended Solids	2.9	0.30	0.50	mg/l	1	AA42245	01/22/14 14:48	01/28/14 10:50	SM2540D		



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/30/14 11:36

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

Batch AA42245 - General Preparation

Blank (AA42245-BLK1)

Prepared: 01/22/14 Analyzed: 01/28/14

Total Suspended Solids	ND	0.30	0.50	mg/l						U
------------------------	----	------	------	------	--	--	--	--	--	---

Duplicate (AA42245-DUP1)

Source: 14A0998-01

Prepared: 01/22/14 Analyzed: 01/28/14

Total Suspended Solids	262	0.30	0.50	mg/l		267		1.78	30	
------------------------	-----	------	------	------	--	-----	--	------	----	--

Duplicate (AA42245-DUP2)

Source: 14A1025-01

Prepared: 01/22/14 Analyzed: 01/28/14

Total Suspended Solids	164	0.30	0.50	mg/l		140		15.8	30	
------------------------	-----	------	------	------	--	-----	--	------	----	--



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

01/30/14 11:36

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates
CHAIN OF CUSTODY

81016471

Quotation No. Invoice 46194

PROJECT NO.: 063-7109-914		SITE NAME: Composite Lehigh S+G permit		ANALYSES		EDD required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
SAMPLER(S): David Walter (printed)		David C. Yalt (signature)		TSS		EDF required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
CONTRACT LABORATORY: Alpha		Container Info						
TURN-AROUND TIME: standard								
Sample I.D.	Lab I.D.	Collection		Matrix	Depth	Type/Vol. Filter Preserv.	Cont. Qty.	Remarks
		Date	Time					
Pond 9 Composite		1-16-14	1045	W		1L	1	Include J-flags
Pond 17 Composite		1-16-14	1110	W		N -	1	

Relinquished by: (signature) David C. Yalt		Received by: (signature) John		Date/Time: 1/16/14 14:55	
Relinquished by: (signature) John		Received by: (signature) John		Date/Time: 1-16-14 1710	
Relinquished by: (signature) John		Received by: (signature) John		Date/Time: 1-16-14 2135	
SEND RESULTS TO: Attn: George Wegmann, Greg Knapp, Golder Associates Inc. 425 Lakeside Drive Sunnyvale, CA 94085 Phone (408) 220-9223 Fax (408) 220-9224					

white: lab copy yellow: project file



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ELAP Certificate Numbers 1551 and 2728

06 February 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14A1333

Enclosed are the results of analyses for samples received by the laboratory on 01/23/14 21:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/06/14 13:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 EFF M-002	14A1333-01	Water	01/23/14 13:25	01/23/14 21:30
Pond 9 UP R-001B	14A1333-02	Water	01/23/14 13:35	01/23/14 21:30
Pond 9 DN R-002B	14A1333-03	Water	01/23/14 13:45	01/23/14 21:30
Pond 17 EFF M-004	14A1333-04	Water	01/23/14 14:00	01/23/14 21:30
Pond 17 DN R-002D	14A1333-05	Water	01/23/14 14:10	01/23/14 21:30



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/06/14 13:20

Metals by EPA 200 Series Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 17 DN R-002D (14A1333-05) Water Sampled: 01/23/14 14:10 Received: 01/23/14 21:30											
Calcium	90	0.010	1.0	mg/l	1	AB40358	02/03/14 14:41	02/04/14 12:39	EPA 200.7		
Magnesium	33	0.0080	1.0	"	"	"	"	"	"		



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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/06/14 13:20

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 EFF M-002 (14A1333-01) Water	Sampled: 01/23/14 13:25	Received: 01/23/14 21:30								
Total Dissolved Solids	820	5.0	10	mg/l	1	AA42727	01/27/14 09:00	01/30/14 08:30	SM2540C	
Total Settleable Solids	0.10	0.10	0.10	ml/l	"	AA42408	01/24/14 15:00	01/24/14 17:00	SM2540F	
Pond 9 UP R-001B (14A1333-02) Water	Sampled: 01/23/14 13:35	Received: 01/23/14 21:30								
Total Dissolved Solids	1500	5.0	10	mg/l	1	AA42727	01/27/14 09:00	01/30/14 08:30	SM2540C	
Pond 9 DN R-002B (14A1333-03) Water	Sampled: 01/23/14 13:45	Received: 01/23/14 21:30								
Total Dissolved Solids	920	5.0	10	mg/l	1	AA42727	01/27/14 09:00	01/30/14 08:30	SM2540C	
Pond 17 EFF M-004 (14A1333-04) Water	Sampled: 01/23/14 14:00	Received: 01/23/14 21:30								
Oil & Grease (HEM)	1.0	0.80	1.4	mg/l	1	AB40319	02/03/14 08:00	02/04/14 15:50	EPA 1664A	J
Total Dissolved Solids	2000	5.0	10	"	"	AA42727	01/27/14 09:00	01/30/14 08:30	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AA42408	01/24/14 15:00	01/24/14 17:00	SM2540F	U
Pond 17 DN R-002D (14A1333-05) Water	Sampled: 01/23/14 14:10	Received: 01/23/14 21:30								
Salinity	ND	2.0	2.0	g/kg	1	AB40325	02/03/14 08:53	02/05/14 15:43	SM2520B	U
Total Dissolved Solids	1100	5.0	10	mg/l	"	AA42727	01/27/14 09:00	01/30/14 08:30	SM2540C	
Hardness, Total	362	1	5	"	"	AB40358	02/03/14 14:41	02/04/14 12:39	SM2340B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/06/14 13:20

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 EFF M-002 (14A1333-01) Water Sampled: 01/23/14 13:25 Received: 01/23/14 21:30										
Chloride	150	0.75	12	mg/l	25	AA42502	01/25/14 08:12	01/25/14 09:33	EPA 300.0	
Pond 9 UP R-001B (14A1333-02) Water Sampled: 01/23/14 13:35 Received: 01/23/14 21:30										
Chloride	110	0.75	12	mg/l	25	AA42502	01/25/14 08:12	01/25/14 09:48	EPA 300.0	
Pond 9 DN R-002B (14A1333-03) Water Sampled: 01/23/14 13:45 Received: 01/23/14 21:30										
Chloride	140	0.75	12	mg/l	25	AA42502	01/25/14 08:12	01/25/14 10:04	EPA 300.0	
Pond 17 EFF M-004 (14A1333-04) Water Sampled: 01/23/14 14:00 Received: 01/23/14 21:30										
Chloride	110	0.75	12	mg/l	25	AA42502	01/25/14 08:12	01/25/14 10:19	EPA 300.0	
Pond 17 DN R-002D (14A1333-05) Water Sampled: 01/23/14 14:10 Received: 01/23/14 21:30										
Chloride	140	0.75	12	mg/l	25	AA42502	01/25/14 08:12	01/25/14 10:34	EPA 300.0	

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/06/14 13:20

Metals by EPA 200 Series Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AB40358 - Metals Digest											
Blank (AB40358-BLK1)						Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	ND	0.010	1.0	mg/l							U
Magnesium	ND	0.0080	1.0	"							U
LCS (AB40358-BS1)						Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	5.33	0.010	1.0	mg/l	5.88		90.6	85-115			
Magnesium	6.95	0.0080	1.0	"	8.00		86.9	85-115			
Duplicate (AB40358-DUP1)						Source: 14A1637-02 Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	46.4	0.010	1.0	mg/l		45.4			2.12	20	
Magnesium	15.0	0.0080	1.0	"		14.9			0.670	20	
Matrix Spike (AB40358-MS1)						Source: 14A1637-02 Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	50.3	0.010	1.0	mg/l	5.88	45.4	84.2	70-130			
Magnesium	21.4	0.0080	1.0	"	8.00	14.9	81.5	70-130			
Matrix Spike (AB40358-MS2)						Source: 14A1754-01 Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	20.7	0.010	1.0	mg/l	5.88	15.0	96.5	70-130			
Magnesium	39.3	0.0080	1.0	"	8.00	30.1	115	70-130			
Matrix Spike Dup (AB40358-MSD1)						Source: 14A1637-02 Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	49.3	0.010	1.0	mg/l	5.88	45.4	66.8	70-130	2.05	20	QM-4X
Magnesium	22.0	0.0080	1.0	"	8.00	14.9	88.5	70-130	2.58	20	

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Lehigh Southwest Cement Company
 Dallas TX, 75266-0140
 PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
 Project: Lehigh S & G Permit
 Project Number: 063-7109-914

Reported:
 02/06/14 13:20

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AA42727 - General Preparation

Blank (AA42727-BLK1)

Prepared: 01/27/14 Analyzed: 01/30/14

Total Dissolved Solids	ND	5.0	10	mg/l							U
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Duplicate (AA42727-DUP1)

Source: 14A1276-01

Prepared: 01/27/14 Analyzed: 01/30/14

Total Dissolved Solids	536	5.0	10	mg/l		584			8.57	30	
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Duplicate (AA42727-DUP2)

Source: 14A1302-01

Prepared: 01/27/14 Analyzed: 01/30/14

Total Dissolved Solids	296	5.0	10	mg/l		301			1.68	30	
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Batch AB40319 - General Preparation

Blank (AB40319-BLK1)

Prepared: 02/03/14 Analyzed: 02/04/14

Oil & Grease (HEM)	ND	0.80	1.4	mg/l							U
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LCS (AB40319-BS1)

Prepared: 02/03/14 Analyzed: 02/04/14

Oil & Grease (HEM)	34.5	0.80	1.4	mg/l	40.0		86.2	78-114		18	
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LCS Dup (AB40319-BSD1)

Prepared: 02/03/14 Analyzed: 02/04/14

Oil & Grease (HEM)	37.1	0.80	1.4	mg/l	40.0		92.8	78-114	7.26	18	
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Matrix Spike (AB40319-MS1)

Source: 14A1730-01

Prepared: 02/03/14 Analyzed: 02/04/14

Oil & Grease (HEM)	18.2	0.80	1.4	mg/l	20.0	0.800	87.0	78-114		18	
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Batch AB40358 - Metals Digest

Blank (AB40358-BLK1)

Prepared: 02/03/14 Analyzed: 02/04/14

Hardness, Total	ND	1	5	mg/l							U
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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/06/14 13:20

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AB40358 - Metals Digest

Duplicate (AB40358-DUP1)

Source: 14A1637-02

Prepared: 02/03/14 Analyzed: 02/04/14

Hardness, Total	177	1	5	mg/l		175			1.61	20	
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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/06/14 13:20

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AA42502 - General Preparation

Blank (AA42502-BLK1)

Prepared & Analyzed: 01/25/14

Chloride	ND	0.030	0.50	mg/l							U
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LCS (AA42502-BS1)

Prepared & Analyzed: 01/25/14

Chloride	10.6	0.030	0.50	mg/l	10.0		106	90-110			
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Duplicate (AA42502-DUP1)

Source: 14A1367-03

Prepared & Analyzed: 01/25/14

Chloride	18.1	0.030	0.50	mg/l		18.2			0.674	20	
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Matrix Spike (AA42502-MS1)

Source: 14A1367-03

Prepared & Analyzed: 01/25/14

Chloride	27.7	0.15	2.5	mg/l	11.1	18.2	86.0	80-120			
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Matrix Spike Dup (AA42502-MSD1)

Source: 14A1367-03

Prepared & Analyzed: 01/25/14

Chloride	27.8	0.15	2.5	mg/l	11.1	18.2	86.3	80-120	0.120	20	
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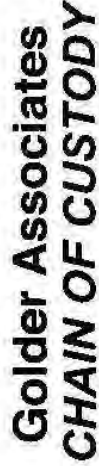
Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/06/14 13:20

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
U	Analyte included in analysis, but not detected at or above MDL.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



14A1333



Page 7 of 7

Associates

CHAIN OF CUSTODY

Quotation No. Invoice beligh

PROJECT NO.:		SITE NAME:		ANALYSES		EDD required?				
063-7109-914		Lehigh STG permit				Yes No				
SAMPLER(S):		CONTRACT LABORATORY:				EDF required?				
David Walter (printed)		Alpha (signature)				Yes No				
TURN-AROUND TIME:		Standard								
Sample I.D.	Lab I.D.	Date	Collection Time	Matrix	Depth	Type/Vol.	Filter	Preserv.	Cont. Qty.	Remarks
Pond 9 EFF M-002	1-23-14	1325	W			1			1	Additional analysis requested
Pond 9 UPR R-001B	1335					1			1	per George
Pond 9 DN R-002B	1345					1			1	OK to pour into H2SO4
Pond 17 EFF M-004	1400					1			1	Container for Dd6
Pond 17 DN R-002D	1410					1			1	1-7144

SS, TDS, chloride
 TDS, chloride
 Salinity, Hardness
 DBP

SEND RESULTS TO:
 Attn: George W. Knapp
 Golder Associates Inc.
 425 Lakeside Drive
 Sunnyvale, CA 94085
 Phone (408) 220-9223
 Fax (408) 220-9224

Received by: (signature)
 David S. Walter
 Relinquished by: (signature)
 David S. Walter

Received by: (signature)
 Tom J. P.
 Relinquished by: (signature)
 Tom J. P.

white: lab copy yellow: project file

Sean Foley@Alpha Labs

From: "Robbie Phillips" <Robbie@alpha-labs.com>
To: "Foley Sean" <sfoley@alpha-labs.com>
Sent: Monday, February 03, 2014 8:53 AM
Attach: 14A1333 01 24 14 0819_02.pdf
Subject: Fw: Lehigh Pond 17 DN

From: Wegmann, George
Sent: Friday, January 31, 2014 5:01 PM
To: mailto:robbie@alpha-labs.com
Subject: FW: Lehigh Pond 17 DN

Hi Robbie,

As we discussed, please add salinity and hardness to Pond 17DN R-002D. Also, please run O&G on sample ID Pond 17 Eff M-004 if you can.

Thanks,
George

George Wegmann | Senior Geologist | **Golder Associates Inc.**
425 Lakeside Drive, Sunnyvale, California, USA 94085
T: +1 (408) 220-9223 | D: +1 (408) 220-9233 | F: +1 (408) 220-9224 | E: George.Wegmann@golder.com |
www.golder.com

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Please consider the environment before printing this email.

From: DeVillier, Kimberly
Sent: Friday, January 31, 2014 4:57 PM
To: Wegmann, George
Subject: Lehigh Pond 17 DN



alpha

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ELAP Certificate Numbers 1551 and 2728

06 February 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14A1423

Enclosed are the results of analyses for samples received by the laboratory on 01/27/14 21:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/06/14 14:27

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 EFF	14A1423-01	Water	01/24/14 09:40	01/27/14 21:10
Pond 17 EFF	14A1423-02	Water	01/24/14 10:00	01/27/14 21:10



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/06/14 14:27

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 9 EFF (14A1423-01) Water Sampled: 01/24/14 09:40 Received: 01/27/14 21:10											
Total Suspended Solids	12	0.30	0.50	mg/l	1	AA42830	01/28/14 09:49	01/31/14 11:02	SM2540D		
Pond 17 EFF (14A1423-02) Water Sampled: 01/24/14 10:00 Received: 01/27/14 21:10											
Total Suspended Solids	3.6	0.30	0.50	mg/l	1	AA42830	01/28/14 09:49	01/31/14 11:02	SM2540D		



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/06/14 14:27

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AA42830 - General Preparation

Blank (AA42830-BLK1)

Prepared: 01/28/14 Analyzed: 01/31/14

Total Suspended Solids	ND	0.30	0.50	mg/l						U
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Duplicate (AA42830-DUP1)

Source: 14A1348-01

Prepared: 01/28/14 Analyzed: 01/31/14

Total Suspended Solids	867	0.30	0.50	mg/l		867		0.00	30	
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Duplicate (AA42830-DUP2)

Source: 14A1304-01

Prepared: 01/28/14 Analyzed: 01/31/14

Total Suspended Solids	504	0.30	0.50	mg/l		512		1.57	30	
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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/06/14 14:27

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates
CHAIN OF CUSTODY

Σ261#41

4.5

Page

1 of 1

Quotation No. Invoice 16166

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ELAP Certificate Numbers 1551 and 2728

13 February 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14A1730

Enclosed are the results of analyses for samples received by the laboratory on 01/30/14 21:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

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Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/13/14 09:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 EFF M-002	14A1730-01	Water	01/30/14 09:50	01/30/14 21:25
Pond 9 UP R-001B	14A1730-02	Water	01/30/14 10:00	01/30/14 21:25
Pond 9 DN R-002B	14A1730-03	Water	01/30/14 10:10	01/30/14 21:25



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/13/14 09:45

Metals by EPA 200 Series Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 UP R-001B (14A1730-02) Water Sampled: 01/30/14 10:00 Received: 01/30/14 21:25										
Calcium	200	0.010	1.0	mg/l	1	AB40358	02/03/14 14:41	02/04/14 12:50	EPA 200.7	
Magnesium	69	0.0080	1.0	"	"	"	"	"	"	
Pond 9 DN R-002B (14A1730-03) Water Sampled: 01/30/14 10:10 Received: 01/30/14 21:25										
Calcium	160	0.010	1.0	mg/l	1	AB40358	02/03/14 14:41	02/04/14 12:55	EPA 200.7	
Magnesium	54	0.0080	1.0	"	"	"	"	"	"	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/13/14 09:45

Conventional Chemistry Parameters by APHA/EPA Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 EFF M-002 (14A1730-01) Water Sampled: 01/30/14 09:50 Received: 01/30/14 21:25										
Oil & Grease (HEM)	0.80	0.80	1.4	mg/l	1	AB40319	02/03/14 08:00	02/04/14 15:50	EPA 1664A	J
Total Dissolved Solids	960	5.0	10	"	"	AB40322	02/03/14 09:00	02/05/14 08:30	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AA43146	01/31/14 13:00	01/31/14 17:00	SM2540F	U
Pond 9 UP R-001B (14A1730-02) Water Sampled: 01/30/14 10:00 Received: 01/30/14 21:25										
Salinity	ND	2.0	2.0	g/kg	1	AB40325	02/03/14 08:53	02/05/14 15:38	SM2520B	U
Total Dissolved Solids	1300	5.0	10	mg/l	"	AB40322	02/03/14 09:00	02/05/14 08:30	SM2540C	
Hardness, Total	794	1	5	"	"	AB40358	02/03/14 14:41	02/04/14 12:50	SM2340B	
Pond 9 DN R-002B (14A1730-03) Water Sampled: 01/30/14 10:10 Received: 01/30/14 21:25										
Salinity	ND	2.0	2.0	g/kg	1	AB40325	02/03/14 08:53	02/05/14 15:38	SM2520B	U
Total Dissolved Solids	1100	5.0	10	mg/l	"	AB40322	02/03/14 09:00	02/05/14 08:30	SM2540C	
Hardness, Total	612	1	5	"	"	AB40358	02/03/14 14:41	02/04/14 12:55	SM2340B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/13/14 09:45

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 EFF M-002 (14A1730-01) Water Sampled: 01/30/14 09:50 Received: 01/30/14 21:25										
Chloride	96	0.75	12	mg/l	25	AA43111	01/31/14 12:28	01/31/14 21:29	EPA 300.0	
Pond 9 UP R-001B (14A1730-02) Water Sampled: 01/30/14 10:00 Received: 01/30/14 21:25										
Chloride	120	0.75	12	mg/l	25	AA43111	01/31/14 12:28	01/31/14 21:44	EPA 300.0	
Pond 9 DN R-002B (14A1730-03) Water Sampled: 01/30/14 10:10 Received: 01/30/14 21:25										
Chloride	100	0.75	12	mg/l	25	AA43111	01/31/14 12:28	01/31/14 21:59	EPA 300.0	

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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/13/14 09:45

Metals by EPA 200 Series Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch AB40358 - Metals Digest										
Blank (AB40358-BLK1)					Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	ND	0.010	1.0	mg/l						U
Magnesium	ND	0.0080	1.0	"						U
LCS (AB40358-BS1)					Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	5.33	0.010	1.0	mg/l	5.88		90.6	85-115		
Magnesium	6.95	0.0080	1.0	"	8.00		86.9	85-115		
Duplicate (AB40358-DUP1)					Source: 14A1637-02 Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	46.4	0.010	1.0	mg/l		45.4		2.12	20	
Magnesium	15.0	0.0080	1.0	"		14.9		0.670	20	
Matrix Spike (AB40358-MS1)					Source: 14A1637-02 Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	50.3	0.010	1.0	mg/l	5.88	45.4	84.2	70-130		
Magnesium	21.4	0.0080	1.0	"	8.00	14.9	81.5	70-130		
Matrix Spike (AB40358-MS2)					Source: 14A1754-01 Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	20.7	0.010	1.0	mg/l	5.88	15.0	96.5	70-130		
Magnesium	39.3	0.0080	1.0	"	8.00	30.1	115	70-130		
Matrix Spike Dup (AB40358-MSD1)					Source: 14A1637-02 Prepared: 02/03/14 Analyzed: 02/04/14					
Calcium	49.3	0.010	1.0	mg/l	5.88	45.4	66.8	70-130	2.05	20 QM-4X
Magnesium	22.0	0.0080	1.0	"	8.00	14.9	88.5	70-130	2.58	20

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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/13/14 09:45

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
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Batch AB40319 - General Preparation

Blank (AB40319-BLK1)					Prepared: 02/03/14 Analyzed: 02/04/14				
Oil & Grease (HEM)	ND	0.80	1.4	mg/l					U
LCS (AB40319-BS1)					Prepared: 02/03/14 Analyzed: 02/04/14				
Oil & Grease (HEM)	34.5	0.80	1.4	mg/l	40.0	86.2	78-114	18	
LCS Dup (AB40319-BSD1)					Prepared: 02/03/14 Analyzed: 02/04/14				
Oil & Grease (HEM)	37.1	0.80	1.4	mg/l	40.0	92.8	78-114	7.26	18
Matrix Spike (AB40319-MS1)					Source: 14A1730-01 Prepared: 02/03/14 Analyzed: 02/04/14				
Oil & Grease (HEM)	18.2	0.80	1.4	mg/l	20.0	0.800	87.0	78-114	18

Batch AB40322 - General Preparation

Blank (AB40322-BLK1)					Prepared: 02/03/14 Analyzed: 02/05/14				
Total Dissolved Solids	ND	5.0	10	mg/l					U
Duplicate (AB40322-DUP1)					Source: 14A1635-01 Prepared: 02/03/14 Analyzed: 02/05/14				
Total Dissolved Solids	361	5.0	10	mg/l	352			2.52	30
Duplicate (AB40322-DUP2)					Source: 14A1730-01 Prepared: 02/03/14 Analyzed: 02/05/14				
Total Dissolved Solids	1010	5.0	10	mg/l	964			4.46	30

Batch AB40358 - Metals Digest

Blank (AB40358-BLK1)					Prepared: 02/03/14 Analyzed: 02/04/14				
Hardness, Total	ND	1	5	mg/l					U



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/13/14 09:45

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
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Batch AB40358 - Metals Digest

Duplicate (AB40358-DUP1)

Source: 14A1637-02

Prepared: 02/03/14 Analyzed: 02/04/14

Hardness, Total	177	1	5	mg/l	175	1.61	20	
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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/13/14 09:45

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch AA43111 - General Preparation										
Blank (AA43111-BLK1)					Prepared & Analyzed: 01/31/14					
Chloride	ND	0.030	0.50	mg/l						U
LCS (AA43111-BS1)					Prepared & Analyzed: 01/31/14					
Chloride	10.2	0.030	0.50	mg/l	10.0		102	90-110		
Duplicate (AA43111-DUP1)					Source: 14A1704-01 Prepared & Analyzed: 01/31/14					
Chloride	2.62	0.030	0.50	mg/l		2.61		0.0765	20	
Matrix Spike (AA43111-MS1)					Source: 14A1704-01 Prepared & Analyzed: 01/31/14					
Chloride	14.2	0.030	0.50	mg/l	11.1	2.61	104	80-120		
Matrix Spike (AA43111-MS2)					Source: 14A1713-01 Prepared & Analyzed: 01/31/14					
Chloride	54.8	0.15	2.5	mg/l	11.1	43.7	100	80-120		
Matrix Spike Dup (AA43111-MSD1)					Source: 14A1704-01 Prepared & Analyzed: 01/31/14					
Chloride	14.2	0.030	0.50	mg/l	11.1	2.61	104	80-120	0.133	20



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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/13/14 09:45

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
U	Analyte included in analysis, but not detected at or above MDL.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



Golder Associates CHAIN OF CUSTODY

PROJECT NO.: 063-7109-914 SITE NAME: Monthly Lehigh STG permit

SAMPLER(S): David Walter (Printed) David C. Walt (Signature)

CONTRACT LABORATORY: Alpha Standard

TURN-AROUND TIME:

Container Info

Type/Vol. Filter Preserv. Depth Matrix Collection Date Time Lab I.D. Sample I.D.

Pond 9 Effm-002 1-30-14 0.950 W

Pond 9 UPR-001B 1000

Pond 9 ONR-002B 1010

Relinquished by (signature) David C. Walt

Relinquished by (signature) David C. Walt

ANALYSES

Top St meth
Chloride-TOS
Hardness-Solubility
TDS+Chloride
0.6

EDD required? Yes No

EDF required? Yes No

Cont. Qty.

Remarks

Include J-flogs

SEND RESULTS TO:

Attn: George Wegman, Greg Knapp
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

Date/Time: 1/30/14 1640

Date/Time: 1-30-14 1500

Date/Time: 1-30-14 2125

Received by (signature) David C. Walt

Received by (signature) David C. Walt

Received by (signature) David C. Walt

Relinquished by (signature) David C. Walt

Relinquished by (signature) David C. Walt

Relinquished by (signature) David C. Walt



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ELAP Certificate Numbers 1551 and 2728

12 February 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14B0002

Enclosed are the results of analyses for samples received by the laboratory on 02/03/14 08:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/12/14 13:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 Composite	14B0002-01	Water	01/31/14 09:15	02/03/14 08:00



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/12/14 13:25

Conventional Chemistry Parameters by APHA/EPA Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 9 Composite (14B0002-01) Water Sampled: 01/31/14 09:15 Received: 02/03/14 08:00											
Total Suspended Solids	ND	0.30	0.50		mg/l	1	AB40337	02/03/14 11:00	02/07/14 12:10	SM2540D	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/12/14 13:25

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AB40337 - General Preparation

Blank (AB40337-BLK1)

Prepared: 02/03/14 Analyzed: 02/07/14

Total Suspended Solids	ND	0.30	0.50	mg/l						U
------------------------	----	------	------	------	--	--	--	--	--	---

Duplicate (AB40337-DUP1)

Source: 14A1703-01

Prepared: 02/03/14 Analyzed: 02/07/14

Total Suspended Solids	13.8	0.30	0.50	mg/l		15.5		11.6	30	
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Duplicate (AB40337-DUP2)

Source: 14A1706-01

Prepared: 02/03/14 Analyzed: 02/07/14

Total Suspended Solids	186	0.30	0.50	mg/l		186		0.00	30	
------------------------	-----	------	------	------	--	-----	--	------	----	--



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/12/14 13:25

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



1430002

0.5

Page 1 of 1
Quotation No. Invoice Lehig

PROJECT NO.:		SITE NAME:		ANALYSES		Quotation No. Invoice No.			
063-7109-914		Composite Lakehigh SFG permit		TSS		<div style="display: flex; justify-content: space-between;"> <div> EDD required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No </div> <div> EDF required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </div> </div>			
SAMPLER(S):		David C. Yaltch (signature)							
CONTRACT LABORATORY:		Alpha							
TURN-AROUND TIME:		Standard							
Sample I.D.	Lab I.D.	Date	Time	Collection	Matrix	Depth	Type/Vol. Filter Preserv.		
Pond 9 Composite		1-31-14	0915	W			1L		
<div style="display: flex; justify-content: space-between;"> <div style="width: 20%;">Cont. Qty.</div> <div style="width: 60%;">Remarks</div> </div> <div style="text-align: center; margin-top: 20px;">1</div> <div style="text-align: center; margin-top: 20px;">Include T-f flags</div>									
Relinquished by: (signature)		Received by: (signature)		Date/Time:		SEND RESULTS TO:			
David C. Yaltch (signature)		David C. Yaltch (signature)		1/31/14 0915		Attn: George Wegmann			
Relinquished by: (signature)		Received by: (signature)		Date/Time:		Golder Associates Inc.			
David C. Yaltch (signature)		David C. Yaltch (signature)		1/31/14 1700		425 Lakeside Drive			
Relinquished by: (signature)		Received by: (signature)		Date/Time:		Sunnyvale, CA 94085			
David C. Yaltch (signature)		David C. Yaltch (signature)		2-3-14 5:00		Phone (408) 220-9223			
Relinquished by: (signature)		Received by: (signature)		Date/Time:		Fax (408) 220-9224			
David C. Yaltch (signature)		David C. Yaltch (signature)		2-3-14 0800					



alpha

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ELAP Certificate Numbers 1551 and 2728

26 February 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14B0521

Enclosed are the results of analyses for samples received by the laboratory on 02/06/14 21:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 13:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 Comp	14B0521-01	Water	02/06/14 12:10	02/06/14 21:50
Pond 17 Comp	14B0521-02	Water	02/06/14 12:50	02/06/14 21:50



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Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 13:57

Conventional Chemistry Parameters by APHA/EPA Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 9 Comp (14B0521-01) Water Sampled: 02/06/14 12:10 Received: 02/06/14 21:50											
Total Suspended Solids	6.5	0.30	0.50	mg/l	1	AB41032	02/10/14 09:06	02/12/14 12:45	SM2540D		
Pond 17 Comp (14B0521-02) Water Sampled: 02/06/14 12:50 Received: 02/06/14 21:50											
Total Suspended Solids	3.4	0.30	0.50	mg/l	1	AB41032	02/10/14 09:06	02/12/14 12:45	SM2540D		



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Dallas TX, 75266-0140

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Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 13:57

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

Batch AB41032 - General Preparation

Blank (AB41032-BLK1)

Prepared: 02/10/14 Analyzed: 02/12/14

Total Suspended Solids	ND	0.30	0.50	mg/l						U
------------------------	----	------	------	------	--	--	--	--	--	---

Duplicate (AB41032-DUP1)

Source: 14B0495-01

Prepared: 02/10/14 Analyzed: 02/12/14

Total Suspended Solids	1120	0.30	0.50	mg/l		1140		1.10	30	
------------------------	------	------	------	------	--	------	--	------	----	--

Duplicate (AB41032-DUP2)

Source: 14B0508-01

Prepared: 02/10/14 Analyzed: 02/12/14

Total Suspended Solids	1400	0.30	0.50	mg/l		1380		0.719	30	
------------------------	------	------	------	------	--	------	--	-------	----	--



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Dallas TX, 75266-0140

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Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 13:57

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



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ELAP Certificate Numbers 1551 and 2728

26 February 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14B0524

Enclosed are the results of analyses for samples received by the laboratory on 02/06/14 21:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/26/14 13:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 EFF M-002	14B0524-01	Water	02/06/14 12:10	02/06/14 21:30
Pond 17 EFF M-004	14B0524-02	Water	02/06/14 12:50	02/06/14 21:30
Pond 20 EFF M-005	14B0524-03	Water	02/06/14 08:30	02/06/14 21:30
Pond 9 UP R-001B	14B0524-04	Water	02/06/14 12:20	02/06/14 21:30
Pond 9 DN R-002B	14B0524-05	Water	02/06/14 12:30	02/06/14 21:30
Pond 17 DN R-002D	14B0524-06	Water	02/06/14 13:05	02/06/14 21:30
Pond 20 DN/21	14B0524-07	Water	02/06/14 08:50	02/06/14 21:30
Downstream	14B0524-08	Water	02/06/14 13:40	02/06/14 21:30
Duplicate	14B0524-09	Water	02/06/14 13:50	02/06/14 21:30
Field Blank	14B0524-10	Water	02/06/14 13:30	02/06/14 21:30



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Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/26/14 13:47

Metals by EPA 200 Series Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond 9 UP R-001B (14B0524-04) Water Sampled: 02/06/14 12:20 Received: 02/06/14 21:30										
Calcium	230	0.010	1.0	mg/l	1	AB41248	02/12/14 13:47	02/14/14 16:42	EPA 200.7	
Magnesium	75	0.0080	1.0	"	"	"	"	"	"	
Pond 9 DN R-002B (14B0524-05) Water Sampled: 02/06/14 12:30 Received: 02/06/14 21:30										
Calcium	130	0.010	1.0	mg/l	1	AB41248	02/12/14 13:47	02/14/14 16:46	EPA 200.7	
Magnesium	31	0.0080	1.0	"	"	"	"	"	"	
Pond 17 DN R-002D (14B0524-06) Water Sampled: 02/06/14 13:05 Received: 02/06/14 21:30										
Calcium	210	0.010	1.0	mg/l	1	AB41248	02/12/14 13:47	02/14/14 16:50	EPA 200.7	
Magnesium	33	0.0080	1.0	"	"	"	"	"	"	
Pond 20 DN/21 (14B0524-07) Water Sampled: 02/06/14 08:50 Received: 02/06/14 21:30										
Calcium	280	0.010	1.0	mg/l	1	AB41248	02/12/14 13:47	02/14/14 16:54	EPA 200.7	
Magnesium	22	0.0080	1.0	"	"	"	"	"	"	
Downstream (14B0524-08) Water Sampled: 02/06/14 13:40 Received: 02/06/14 21:30										
Calcium	150	0.010	1.0	mg/l	1	AB41248	02/12/14 13:47	02/14/14 16:58	EPA 200.7	
Magnesium	38	0.0080	1.0	"	"	"	"	"	"	
Duplicate (14B0524-09) Water Sampled: 02/06/14 13:50 Received: 02/06/14 21:30										
Calcium	140	0.010	1.0	mg/l	1	AB41248	02/12/14 13:47	02/14/14 17:19	EPA 200.7	
Magnesium	36	0.0080	1.0	"	"	"	"	"	"	

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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/26/14 13:47

Metals by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond 9 EFF M-002 (14B0524-01) Water Sampled: 02/06/14 12:10 Received: 02/06/14 21:30										
Chromium, hexavalent	0.0060	0.0050	0.010	mg/l	1	AB42028	02/20/14 15:15	02/20/14 16:56	SM3500-Cr B	J
Mercury	400	2.00	5.00	ng/l	10	AB42467	02/24/14 17:00	02/25/14 13:02	EPA 1631E	
Pond 17 EFF M-004 (14B0524-02) Water Sampled: 02/06/14 12:50 Received: 02/06/14 21:30										
Chromium, hexavalent	ND	0.0050	0.010	mg/l	1	AB42028	02/20/14 15:15	02/20/14 16:56	SM3500-Cr B	U
Mercury	17.1	0.200	0.500	ng/l	"	AB42467	02/24/14 17:00	02/25/14 13:11	EPA 1631E	
Pond 20 EFF M-005 (14B0524-03) Water Sampled: 02/06/14 08:30 Received: 02/06/14 21:30										
Chromium, hexavalent	0.034	0.0050	0.010	mg/l	1	AB42028	02/20/14 15:15	02/20/14 16:56	SM3500-Cr B	
Mercury	331	2.00	5.00	ng/l	10	AB42467	02/24/14 17:00	02/25/14 13:35	EPA 1631E	
Pond 9 DN R-002B (14B0524-05) Water Sampled: 02/06/14 12:30 Received: 02/06/14 21:30										
Chromium, hexavalent	ND	0.0050	0.010	mg/l	1	AB42028	02/20/14 15:15	02/20/14 16:56	SM3500-Cr B	U
Mercury	350	2.00	5.00	ng/l	10	AB42467	02/24/14 17:00	02/25/14 13:43	EPA 1631E	
Pond 17 DN R-002D (14B0524-06) Water Sampled: 02/06/14 13:05 Received: 02/06/14 21:30										
Chromium, hexavalent	0.0060	0.0050	0.010	mg/l	1	AB42028	02/20/14 15:15	02/20/14 16:56	SM3500-Cr B	J
Mercury	149	2.00	5.00	ng/l	10	AB42467	02/24/14 17:00	02/25/14 13:51	EPA 1631E	
Pond 20 DN/21 (14B0524-07) Water Sampled: 02/06/14 08:50 Received: 02/06/14 21:30										
Chromium, hexavalent	0.016	0.0050	0.010	mg/l	1	AB42028	02/20/14 15:15	02/20/14 16:56	SM3500-Cr B	
Mercury	161	2.00	5.00	ng/l	10	AB42467	02/24/14 17:00	02/25/14 14:16	EPA 1631E	
Downstream (14B0524-08) Water Sampled: 02/06/14 13:40 Received: 02/06/14 21:30										
Chromium, hexavalent	ND	0.0050	0.010	mg/l	1	AB42028	02/20/14 15:15	02/20/14 16:56	SM3500-Cr B	U
Mercury	23.2	2.00	5.00	ng/l	10	AB42467	02/24/14 17:00	02/25/14 14:24	EPA 1631E	

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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/26/14 13:47

Metals by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Duplicate (14B0524-09) Water Sampled: 02/06/14 13:50 Received: 02/06/14 21:30										
Chromium, hexavalent	ND	0.0050	0.010	mg/l	1	AB42028	02/20/14 15:15	02/20/14 16:56	SM3500-Cr B	U
Mercury	23.7	2.00	5.00	ng/l	10	AB42467	02/24/14 17:00	02/25/14 14:32	EPA 1631E	
Field Blank (14B0524-10) Water Sampled: 02/06/14 13:30 Received: 02/06/14 21:30										
Mercury	ND	0.200	0.500	ng/l	1	AB42467	02/24/14 17:00	02/25/14 14:40	EPA 1631E	U



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Project Manager: Chow Yip
 Project: Lehigh S & G Permit
 Project Number: 063-7109-914

Reported:
 02/26/14 13:47

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond 9 EFF M-002 (14B0524-01) Water Sampled: 02/06/14 12:10 Received: 02/06/14 21:30										
Oil & Grease (HEM)	1.0	0.80	1.4	mg/l	1	AB41129	02/11/14 08:00	02/14/14 13:00	EPA 1664A	J
Total Dissolved Solids	840	5.0	10	"	"	AB41237	02/12/14 13:30	02/18/14 15:30	SM2540C	
Total Settleable Solids	0.50	0.10	0.10	ml/l	"	AB41140	02/07/14 13:00	02/07/14 17:00	SM2540F	
Pond 17 EFF M-004 (14B0524-02) Water Sampled: 02/06/14 12:50 Received: 02/06/14 21:30										
Oil & Grease (HEM)	1.3	0.80	1.4	mg/l	1	AB41129	02/11/14 08:00	02/14/14 13:00	EPA 1664A	J
Total Dissolved Solids	1900	5.0	10	"	"	AB41237	02/12/14 13:30	02/18/14 15:30	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AB41140	02/07/14 13:00	02/07/14 17:00	SM2540F	U
Pond 20 EFF M-005 (14B0524-03) Water Sampled: 02/06/14 08:30 Received: 02/06/14 21:30										
Oil & Grease (HEM)	2.0	0.80	1.4	mg/l	1	AB41129	02/11/14 08:00	02/14/14 13:00	EPA 1664A	
Total Dissolved Solids	1000	5.0	10	"	"	AB41237	02/12/14 13:30	02/18/14 15:30	SM2540C	
Total Suspended Solids	480	0.30	0.50	"	"	AB41151	02/11/14 12:11	02/13/14 12:00	SM2540D	
Total Settleable Solids	1.2	0.10	0.10	ml/l	"	AB41140	02/07/14 13:00	02/07/14 17:00	SM2540F	
Pond 9 UP R-001B (14B0524-04) Water Sampled: 02/06/14 12:20 Received: 02/06/14 21:30										
Salinity	ND	2.0	2.0	g/kg	1	AB41940	02/19/14 10:31	02/20/14 14:41	SM2520B	U
Total Dissolved Solids	1400	5.0	10	mg/l	"	AB41237	02/12/14 13:30	02/18/14 15:30	SM2540C	
Hardness, Total	885	1	5	"	"	AB41248	02/12/14 13:47	02/14/14 16:42	SM2340B	
Pond 9 DN R-002B (14B0524-05) Water Sampled: 02/06/14 12:30 Received: 02/06/14 21:30										
Salinity	ND	2.0	2.0	g/kg	1	AB41940	02/19/14 10:31	02/20/14 14:41	SM2520B	U
Total Dissolved Solids	860	5.0	10	mg/l	"	AB41237	02/12/14 13:30	02/18/14 15:30	SM2540C	
Hardness, Total	457	1	5	"	"	AB41248	02/12/14 13:47	02/14/14 16:46	SM2340B	

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 13:47

Conventional Chemistry Parameters by APHA/EPA Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond 17 DN R-002D (14B0524-06) Water Sampled: 02/06/14 13:05 Received: 02/06/14 21:30										
Salinity	ND	2.0	2.0	g/kg	1	AB41940	02/19/14 10:31	02/20/14 14:41	SM2520B	U
Total Dissolved Solids	1200	5.0	10	mg/l	"	AB41237	02/12/14 13:30	02/18/14 15:30	SM2540C	
Hardness, Total	657	1	5	"	"	AB41248	02/12/14 13:47	02/14/14 16:50	SM2340B	
Pond 20 DN/21 (14B0524-07) Water Sampled: 02/06/14 08:50 Received: 02/06/14 21:30										
Salinity	ND	2.0	2.0	g/kg	1	AB41940	02/19/14 10:31	02/20/14 14:41	SM2520B	U
Total Dissolved Solids	1000	5.0	10	mg/l	"	AB41237	02/12/14 13:30	02/18/14 15:30	SM2540C	
Hardness, Total	796	1	5	"	"	AB41248	02/12/14 13:47	02/14/14 16:54	SM2340B	
Downstream (14B0524-08) Water Sampled: 02/06/14 13:40 Received: 02/06/14 21:30										
Salinity	ND	2.0	2.0	g/kg	1	AB41940	02/19/14 10:31	02/20/14 14:41	SM2520B	U
Total Dissolved Solids	1000	5.0	10	mg/l	"	AB41237	02/12/14 13:30	02/18/14 15:30	SM2540C	
Hardness, Total	537	1	5	"	"	AB41248	02/12/14 13:47	02/14/14 16:58	SM2340B	
Duplicate (14B0524-09) Water Sampled: 02/06/14 13:50 Received: 02/06/14 21:30										
Oil & Grease (HEM)	1.4	0.80	1.4	mg/l	1	AB41129	02/11/14 08:00	02/14/14 13:00	EPA 1664A	
Salinity	ND	2.0	2.0	g/kg	"	AB41940	02/19/14 10:31	02/20/14 14:41	SM2520B	U
Total Dissolved Solids	1100	5.0	10	mg/l	"	AB41237	02/12/14 13:30	02/18/14 15:30	SM2540C	
Total Suspended Solids	15	0.30	0.50	"	"	AB41151	02/11/14 12:11	02/13/14 12:00	SM2540D	
Hardness, Total	510	1	5	"	"	AB41248	02/12/14 13:47	02/14/14 17:19	SM2340B	

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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/26/14 13:47

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond 9 EFF M-002 (14B0524-01) Water Sampled: 02/06/14 12:10 Received: 02/06/14 21:30										
Chloride	82	0.60	10	mg/l	20	AB41133	02/11/14 08:18	02/11/14 11:11	EPA 300.0	
Pond 17 EFF M-004 (14B0524-02) Water Sampled: 02/06/14 12:50 Received: 02/06/14 21:30										
Chloride	90	1.5	25	mg/l	50	AB41133	02/11/14 08:18	02/11/14 11:26	EPA 300.0	
Pond 20 EFF M-005 (14B0524-03) Water Sampled: 02/06/14 08:30 Received: 02/06/14 21:30										
Chloride	56	0.75	12	mg/l	25	AB41133	02/11/14 08:18	02/11/14 12:12	EPA 300.0	
Pond 9 UP R-001B (14B0524-04) Water Sampled: 02/06/14 12:20 Received: 02/06/14 21:30										
Chloride	120	0.75	12	mg/l	25	AB41133	02/11/14 08:18	02/11/14 15:10	EPA 300.0	
Pond 9 DN R-002B (14B0524-05) Water Sampled: 02/06/14 12:30 Received: 02/06/14 21:30										
Chloride	92	0.60	10	mg/l	20	AB41133	02/11/14 08:18	02/11/14 15:25	EPA 300.0	
Pond 17 DN R-002D (14B0524-06) Water Sampled: 02/06/14 13:05 Received: 02/06/14 21:30										
Chloride	91	0.75	12	mg/l	25	AB41133	02/11/14 08:18	02/11/14 15:40	EPA 300.0	
Pond 20 DN/21 (14B0524-07) Water Sampled: 02/06/14 08:50 Received: 02/06/14 21:30										
Chloride	66	0.75	12	mg/l	25	AB41133	02/11/14 08:18	02/11/14 15:55	EPA 300.0	
Downstream (14B0524-08) Water Sampled: 02/06/14 13:40 Received: 02/06/14 21:30										
Chloride	100	0.75	12	mg/l	25	AB41133	02/11/14 08:18	02/11/14 16:10	EPA 300.0	
Duplicate (14B0524-09) Water Sampled: 02/06/14 13:50 Received: 02/06/14 21:30										
Chloride	98	0.75	12	mg/l	25	AB41133	02/11/14 08:18	02/11/14 16:25	EPA 300.0	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 13:47

Metals by EPA 200 Series Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AB41248 - Metals Digest

Blank (AB41248-BLK1)

Prepared: 02/12/14 Analyzed: 02/14/14

Calcium	0.428	0.010	1.0	mg/l							J
Magnesium	ND	0.0080	1.0	"							U

LCS (AB41248-BS1)

Prepared: 02/12/14 Analyzed: 02/14/14

Calcium	5.89	0.010	1.0	mg/l	5.88		100	85-115			
Magnesium	7.23	0.0080	1.0	"	8.00		90.4	85-115			

Duplicate (AB41248-DUP1)

Source: 14B0746-02

Prepared: 02/12/14 Analyzed: 02/14/14

Calcium	60.0	0.010	1.0	mg/l		59.5			0.852	20	
Magnesium	22.6	0.0080	1.0	"		22.4			0.551	20	

Matrix Spike (AB41248-MS1)

Source: 14B0746-02

Prepared: 02/12/14 Analyzed: 02/14/14

Calcium	63.3	0.010	1.0	mg/l	5.88	59.5	65.3	70-130			QM-4X
Magnesium	29.6	0.0080	1.0	"	8.00	22.4	89.1	70-130			

Matrix Spike (AB41248-MS2)

Source: 14B0805-03

Prepared: 02/12/14 Analyzed: 02/14/14

Calcium	60.5	0.010	1.0	mg/l	5.88	53.3	121	70-130			
Magnesium	56.0	0.0080	1.0	"	8.00	47.4	107	70-130			

Matrix Spike Dup (AB41248-MSD1)

Source: 14B0746-02

Prepared: 02/12/14 Analyzed: 02/14/14

Calcium	66.2	0.010	1.0	mg/l	5.88	59.5	114	70-130	4.42	20	
Magnesium	30.0	0.0080	1.0	"	8.00	22.4	94.8	70-130	1.54	20	



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Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/26/14 13:47

Metals by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AB42028 - SM3500 Cr6 Water

Blank (AB42028-BLK1)

Prepared & Analyzed: 02/20/14

Chromium, hexavalent	ND	0.0050	0.010	mg/l						U
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LCS (AB42028-BS1)

Prepared & Analyzed: 02/20/14

Chromium, hexavalent	0.103	0.0050	0.010	mg/l	0.100		103	80-120		
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Duplicate (AB42028-DUP1)

Source: 14B0524-05

Prepared & Analyzed: 02/20/14

Chromium, hexavalent	ND	0.0050	0.010	mg/l		ND			20	U
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Matrix Spike (AB42028-MS1)

Source: 14B0524-05

Prepared & Analyzed: 02/20/14

Chromium, hexavalent	0.101	0.0050	0.010	mg/l	0.100	ND	101	0-200		
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Matrix Spike Dup (AB42028-MSD1)

Source: 14B0524-05

Prepared & Analyzed: 02/20/14

Chromium, hexavalent	0.102	0.0050	0.010	mg/l	0.100	ND	102	0-200	0.998	20
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Batch AB42467 - EPA 1631

Blank (AB42467-BLK1)

Prepared: 02/24/14 Analyzed: 02/25/14

Mercury	ND	0.200	0.500	ng/l						U
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Mercury	ND	0.200	0.500	"						U
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LCS (AB42467-BS1)

Prepared: 02/24/14 Analyzed: 02/25/14

Mercury	4.76	0.200	0.500	ng/l	5.00		95.2	77-123		
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Matrix Spike (AB42467-MS1)

Source: 14B0524-02

Prepared: 02/24/14 Analyzed: 02/25/14

Mercury	41.8	0.200	0.500	ng/l	25.0	17.1	98.8	71-125		
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Matrix Spike (AB42467-MS2)

Source: 14B1198-03

Prepared: 02/24/14 Analyzed: 02/25/14

Mercury	28.0	0.200	0.500	ng/l	25.0	1.86	104	71-125		
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PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/26/14 13:47

Metals by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AB42467 - EPA 1631

Matrix Spike Dup (AB42467-MSD1)

Source: 14B0524-02

Prepared: 02/24/14 Analyzed: 02/25/14

Mercury	41.6	0.200	0.500	ng/l	25.0	17.1	98.3	71-125	0.336	24
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Matrix Spike Dup (AB42467-MSD2)

Source: 14B1198-03

Prepared: 02/24/14 Analyzed: 02/25/14

Mercury	27.5	0.200	0.500	ng/l	25.0	1.86	102	71-125	1.80	24
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Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 13:47

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
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Batch AB41129 - General Preparation

Blank (AB41129-BLK1)

Prepared: 02/11/14 Analyzed: 02/14/14

Oil & Grease (HEM)	ND	0.80	1.4	mg/l					U
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LCS (AB41129-BS1)

Prepared: 02/11/14 Analyzed: 02/14/14

Oil & Grease (HEM)	39.6	0.80	1.4	mg/l	40.0	99.0	78-114	18	
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LCS Dup (AB41129-BSD1)

Prepared: 02/11/14 Analyzed: 02/14/14

Oil & Grease (HEM)	36.2	0.80	1.4	mg/l	40.0	90.5	78-114	8.97	18
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Batch AB41151 - General Preparation

Blank (AB41151-BLK1)

Prepared: 02/11/14 Analyzed: 02/13/14

Total Suspended Solids	ND	0.30	0.50	mg/l					U
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Duplicate (AB41151-DUP1)

Source: 14B0524-03

Prepared: 02/11/14 Analyzed: 02/13/14

Total Suspended Solids	492	0.30	0.50	mg/l	484			1.64	30
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Duplicate (AB41151-DUP2)

Source: 14B0528-01

Prepared: 02/11/14 Analyzed: 02/13/14

Total Suspended Solids	512	0.30	0.50	mg/l	520			1.55	30
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Batch AB41237 - General Preparation

Blank (AB41237-BLK1)

Prepared: 02/12/14 Analyzed: 02/18/14

Total Dissolved Solids	ND	5.0	10	mg/l					U
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Duplicate (AB41237-DUP1)

Source: 14B0727-01

Prepared: 02/12/14 Analyzed: 02/18/14

Total Dissolved Solids	488	5.0	10	mg/l	536			9.38	30
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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 13:47

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AB41237 - General Preparation

Duplicate (AB41237-DUP2)

Source: 14B0732-05

Prepared: 02/12/14 Analyzed: 02/18/14

Total Dissolved Solids	892	5.0	10	mg/l		916			2.65	30	
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Batch AB41248 - Metals Digest

Blank (AB41248-BLK1)

Prepared: 02/12/14 Analyzed: 02/14/14

Hardness, Total	1	1	5	mg/l							J
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Duplicate (AB41248-DUP1)

Source: 14B0746-02

Prepared: 02/12/14 Analyzed: 02/14/14

Hardness, Total	243	1	5	mg/l		241			0.737	20	
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Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/26/14 13:47

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AB41133 - General Preparation

Blank (AB41133-BLK1)

Prepared & Analyzed: 02/11/14

Chloride	ND	0.030	0.50	mg/l							U
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LCS (AB41133-BS1)

Prepared & Analyzed: 02/11/14

Chloride	10.9	0.030	0.50	mg/l	11.1		98.3	90-110			
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Duplicate (AB41133-DUP1)

Source: 14B0699-01

Prepared & Analyzed: 02/11/14

Chloride	11.0	0.030	0.50	mg/l		10.9			0.512	20	
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Matrix Spike (AB41133-MS1)

Source: 14B0699-01

Prepared: 02/11/14 Analyzed: 02/15/14

Chloride	23.2	0.060	1.0	mg/l	11.1	10.9	111	80-120			
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Matrix Spike (AB41133-MS2)

Source: 14B0691-01

Prepared: 02/11/14 Analyzed: 02/15/14

Chloride	20.5	0.030	0.50	mg/l	11.1	9.00	103	80-120			
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Matrix Spike Dup (AB41133-MSD1)

Source: 14B0699-01

Prepared: 02/11/14 Analyzed: 02/15/14

Chloride	23.3	0.060	1.0	mg/l	11.1	10.9	112	80-120	0.448	20	
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alpha

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Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/26/14 13:47

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
U	Analyte included in analysis, but not detected at or above MDL.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

March 11, 2014

Alpha Analytical Laboratories Inc.
ATTN: Robbie Phillips
208 Mason St.
Ukiah, CA 95482
robbie@alpha-labs.com

RE: Project AAL-DB1301

Client Project: 14B0524

Dear Mr. Phillips,

On February 11, 2014, Brooks Rand Labs (BRL) received nine (9) water samples. The samples were logged-in for the contracted analyses of total silver (Ag), arsenic (As), beryllium (Be), cadmium (Cd), chromium (Cr), copper (Cu), nickel (Ni), lead (Pb), antimony (Sb), selenium (Se), thallium (Tl), and zinc (Zn) according to the chain-of-custody (COC) forms. Samples for dissolved analyses were field filtered. The samples were received, prepared, analyzed, and stored according to BRL SOPs and EPA methodology.

In instances where the native sample result and/or the associated duplicate (DUP) result were below the MDL the RPD was not calculated (**N/C**).

In instances where a matrix spike/matrix spike duplicate (MS/MSD) set was spiked at a level less than the native sample, the recoveries are not considered valid indicators of data quality. However, these results are reported as a demonstration of precision. When the spiking levels were $\leq 25\%$ of the native sample concentrations, the recoveries were not reported (NR).

The sample *14B0524-10 Field Blank* (1407015-10) was labeled as a field blank and had Cu, Pb, and Zn concentrations above the MRL. All associated samples had Cu and Zn concentrations greater than 10x the concentration of the field blank. The Pb results for the samples may demonstrate possible contamination through field sample collection techniques employed.

The results were blank-corrected as described in the calculations section of the relevant SOP(s) and may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details. Aside from concentration qualifiers, all data was reported without qualification and all other associated quality control sample results met the acceptance criteria.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,



Lydia Greaves
Project Manager
lydia@brooksrands.com

Report Information

Laboratory Accreditation

BRL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BRL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <<http://www.brooksrand.com/default.asp?contentID=586>>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

BLK	method blank	MS	matrix spike
BRL	Brooks Rand Labs	MSD	matrix spike duplicate
BS	laboratory fortified blank	ND	non-detect
CAL	calibration standard	NR	non-reportable
CCV	continuing calibration verification	PS	post preparation spike
COC	chain of custody record	REC	percent recovery
CRM	certified reference material	RPD	relative percent difference
D	dissolved fraction	RSD	relative standard deviation
DUP	duplicate	SCV	secondary calibration verification
ICV	initial calibration verification	SOP	standard operating procedure
MDL	method detection limit	SRM	standard reference material
MRL	method reporting limit	T	total recoverable fraction
IBL	instrument blank		

Definition of Data Qualifiers

(Effective 9/23/09)

B	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Result is estimated.
J	Estimated value. A full explanation is presented in the narrative.
J-M	Duplicate precision (RPD) for associated QC sample was not within acceptance criteria. Result is estimated.
J-N	Spike recovery for associated QC sample was not within acceptance criteria. Result is estimated.
M	Duplicate precision (RPD) was not within acceptance criteria. Result is estimated.
N	Spike recovery was not within acceptance criteria. Result is estimated.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Rand Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BRL.



Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
14B0524-01 Pond 9 EFF M-002	1407015-01	Water	Sample	02/06/2014	02/11/2014
14B0524-02 Pond 17 EFF M-004	1407015-02	Water	Sample	02/06/2014	02/11/2014
14B0524-03 Pond 20 EFF M-005	1407015-03	Water	Sample	02/06/2014	02/11/2014
14B0524-05 Pond 9 DN R-002B	1407015-04	Water	Sample	02/06/2014	02/11/2014
14B0524-06 Pond 17 DN R-002D	1407015-05	Water	Sample	02/06/2014	02/11/2014
14B0524-07 Pond 20 DN/21	1407015-06	Water	Sample	02/06/2014	02/11/2014
14B0524-08 Downstream	1407015-07	Water	Sample	02/06/2014	02/11/2014
14B0524-09 Duplicate	1407015-08	Water	Field Duplicate	02/06/2014	02/11/2014
14B0524-10 Field Blank	1407015-09	DIW	Field Blank	02/06/2014	02/11/2014

Batch Summary

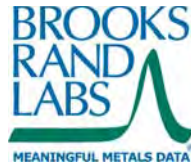
Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
Ag	Water	EPA 1638	02/13/2014	02/27/2014	B140238	1400161
As	Water	EPA 1638 DRC	02/13/2014	02/28/2014	B140239	1400167
Be	Water	EPA 1638	02/13/2014	02/27/2014	B140238	1400161
Cd	Water	EPA 1638	02/13/2014	02/27/2014	B140238	1400161
Cr	Water	EPA 1638 DRC	02/13/2014	03/06/2014	B140240	1400186
Cu	Water	EPA 1638	02/13/2014	02/27/2014	B140238	1400161
Ni	Water	EPA 1638 DRC	02/13/2014	03/06/2014	B140240	1400186
Pb	Water	EPA 1638	02/13/2014	02/27/2014	B140238	1400161
Sb	Water	EPA 1638	02/13/2014	02/27/2014	B140238	1400161
Se	Water	EPA 1638 DRC	02/13/2014	02/28/2014	B140239	1400167
Tl	Water	EPA 1638	02/13/2014	02/27/2014	B140238	1400161
Zn	Water	EPA 1638	02/13/2014	02/27/2014	B140238	1400161

Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
14B0524-01 Pond 9 EFF M-002										
1407015-01	Ag	Water	T	0.044		0.005	0.021	µg/L	B140238	1400161
1407015-01	As	Water	T	2.03		0.047	0.158	µg/L	B140239	1400167
1407015-01	Be	Water	T	0.070	B	0.053	0.158	µg/L	B140238	1400161
1407015-01	Cd	Water	T	0.312		0.007	0.021	µg/L	B140238	1400161
1407015-01	Cr	Water	T	20.2		0.158	0.474	µg/L	B140240	1400186
1407015-01	Cu	Water	T	11.5		0.042	0.126	µg/L	B140238	1400161
1407015-01	Ni	Water	T	25.5		0.526	2.11	µg/L	B140240	1400186
1407015-01	Pb	Water	T	1.08		0.006	0.026	µg/L	B140238	1400161
1407015-01	Sb	Water	T	0.708		0.011	0.042	µg/L	B140238	1400161
1407015-01	Se	Water	T	7.71		0.105	0.316	µg/L	B140239	1400167
1407015-01	Tl	Water	T	0.618		0.003	0.011	µg/L	B140238	1400161
1407015-01	Zn	Water	T	33.2		0.06	0.21	µg/L	B140238	1400161
14B0524-02 Pond 17 EFF M-004										
1407015-02	Ag	Water	T	0.012	B	0.005	0.021	µg/L	B140238	1400161
1407015-02	As	Water	T	0.606		0.047	0.158	µg/L	B140239	1400167
1407015-02	Be	Water	T	0.053	U	0.053	0.158	µg/L	B140238	1400161
1407015-02	Cd	Water	T	0.221		0.007	0.021	µg/L	B140238	1400161
1407015-02	Cr	Water	T	3.53		0.158	0.474	µg/L	B140240	1400186
1407015-02	Cu	Water	T	4.77		0.042	0.126	µg/L	B140238	1400161
1407015-02	Ni	Water	T	25.6		0.526	2.11	µg/L	B140240	1400186
1407015-02	Pb	Water	T	0.124		0.006	0.026	µg/L	B140238	1400161
1407015-02	Sb	Water	T	1.91		0.011	0.042	µg/L	B140238	1400161
1407015-02	Se	Water	T	27.6		0.105	0.316	µg/L	B140239	1400167
1407015-02	Tl	Water	T	0.318		0.003	0.011	µg/L	B140238	1400161
1407015-02	Zn	Water	T	12.1		0.06	0.21	µg/L	B140238	1400161
14B0524-03 Pond 20 EFF M-005										
1407015-03	Ag	Water	T	0.133		0.005	0.021	µg/L	B140238	1400161
1407015-03	As	Water	T	3.44		0.047	0.158	µg/L	B140239	1400167
1407015-03	Be	Water	T	0.196		0.053	0.158	µg/L	B140238	1400161
1407015-03	Cd	Water	T	0.901		0.007	0.021	µg/L	B140238	1400161
1407015-03	Cr	Water	T	78.6		0.158	0.474	µg/L	B140240	1400186
1407015-03	Cu	Water	T	23.3		0.042	0.126	µg/L	B140238	1400161
1407015-03	Ni	Water	T	69.4		0.526	2.11	µg/L	B140240	1400186
1407015-03	Pb	Water	T	4.75		0.006	0.026	µg/L	B140238	1400161
1407015-03	Sb	Water	T	0.858		0.011	0.042	µg/L	B140238	1400161
1407015-03	Se	Water	T	9.11		0.105	0.316	µg/L	B140239	1400167
1407015-03	Tl	Water	T	0.741		0.003	0.011	µg/L	B140238	1400161
1407015-03	Zn	Water	T	90.6		0.06	0.21	µg/L	B140238	1400161

Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
14B0524-05 Pond 9 DN R-002B										
1407015-04	Ag	Water	T	0.034		0.005	0.021	µg/L	B140238	1400161
1407015-04	As	Water	T	1.69		0.047	0.158	µg/L	B140239	1400167
1407015-04	Be	Water	T	0.053	U	0.053	0.158	µg/L	B140238	1400161
1407015-04	Cd	Water	T	0.264		0.007	0.021	µg/L	B140238	1400161
1407015-04	Cr	Water	T	17.3		0.158	0.474	µg/L	B140240	1400186
1407015-04	Cu	Water	T	10.2		0.042	0.126	µg/L	B140238	1400161
1407015-04	Ni	Water	T	21.8		0.526	2.11	µg/L	B140240	1400186
1407015-04	Pb	Water	T	0.901		0.006	0.026	µg/L	B140238	1400161
1407015-04	Sb	Water	T	0.655		0.011	0.042	µg/L	B140238	1400161
1407015-04	Se	Water	T	7.31		0.105	0.316	µg/L	B140239	1400167
1407015-04	Tl	Water	T	0.599		0.003	0.011	µg/L	B140238	1400161
1407015-04	Zn	Water	T	28.2		0.06	0.21	µg/L	B140238	1400161
14B0524-06 Pond 17 DN R-002D										
1407015-05	Ag	Water	T	0.016	B	0.005	0.021	µg/L	B140238	1400161
1407015-05	As	Water	T	1.10		0.047	0.158	µg/L	B140239	1400167
1407015-05	Be	Water	T	0.053	U	0.053	0.158	µg/L	B140238	1400161
1407015-05	Cd	Water	T	0.178		0.007	0.021	µg/L	B140238	1400161
1407015-05	Cr	Water	T	10.6		0.158	0.474	µg/L	B140240	1400186
1407015-05	Cu	Water	T	6.23		0.042	0.126	µg/L	B140238	1400161
1407015-05	Ni	Water	T	16.7		0.526	2.11	µg/L	B140240	1400186
1407015-05	Pb	Water	T	0.394		0.006	0.026	µg/L	B140238	1400161
1407015-05	Sb	Water	T	0.873		0.011	0.042	µg/L	B140238	1400161
1407015-05	Se	Water	T	11.4		0.105	0.316	µg/L	B140239	1400167
1407015-05	Tl	Water	T	0.397		0.003	0.011	µg/L	B140238	1400161
1407015-05	Zn	Water	T	15.7		0.06	0.21	µg/L	B140238	1400161
14B0524-07 Pond 20 DN/21										
1407015-06	Ag	Water	T	0.087		0.005	0.021	µg/L	B140238	1400161
1407015-06	As	Water	T	2.27		0.047	0.158	µg/L	B140239	1400167
1407015-06	Be	Water	T	0.119	B	0.053	0.158	µg/L	B140238	1400161
1407015-06	Cd	Water	T	0.599		0.007	0.021	µg/L	B140238	1400161
1407015-06	Cr	Water	T	47.3		0.158	0.474	µg/L	B140240	1400186
1407015-06	Cu	Water	T	15.3		0.042	0.126	µg/L	B140238	1400161
1407015-06	Ni	Water	T	45.5		0.526	2.11	µg/L	B140240	1400186
1407015-06	Pb	Water	T	3.11		0.006	0.026	µg/L	B140238	1400161
1407015-06	Sb	Water	T	0.523		0.011	0.042	µg/L	B140238	1400161
1407015-06	Se	Water	T	4.94		0.105	0.316	µg/L	B140239	1400167
1407015-06	Tl	Water	T	0.451		0.003	0.011	µg/L	B140238	1400161
1407015-06	Zn	Water	T	56.7		0.06	0.21	µg/L	B140238	1400161



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
14B0524-08 Downstream										
1407015-07	Ag	Water	T	0.009	B	0.005	0.021	µg/L	B140238	1400161
1407015-07	As	Water	T	1.01		0.047	0.158	µg/L	B140239	1400167
1407015-07	Be	Water	T	0.053	U	0.053	0.158	µg/L	B140238	1400161
1407015-07	Cd	Water	T	0.110		0.007	0.021	µg/L	B140238	1400161
1407015-07	Cr	Water	T	5.78		0.158	0.474	µg/L	B140240	1400186
1407015-07	Cu	Water	T	4.40		0.042	0.126	µg/L	B140238	1400161
1407015-07	Ni	Water	T	13.5		0.526	2.11	µg/L	B140240	1400186
1407015-07	Pb	Water	T	0.305		0.006	0.026	µg/L	B140238	1400161
1407015-07	Sb	Water	T	0.512		0.011	0.042	µg/L	B140238	1400161
1407015-07	Se	Water	T	6.49		0.105	0.316	µg/L	B140239	1400167
1407015-07	Tl	Water	T	0.117		0.003	0.011	µg/L	B140238	1400161
1407015-07	Zn	Water	T	9.19		0.06	0.21	µg/L	B140238	1400161
14B0524-09 Duplicate										
1407015-08	Ag	Water	T	0.007	B	0.005	0.021	µg/L	B140238	1400161
1407015-08	As	Water	T	1.06		0.047	0.158	µg/L	B140239	1400167
1407015-08	Be	Water	T	0.053	U	0.053	0.158	µg/L	B140238	1400161
1407015-08	Cd	Water	T	0.112		0.007	0.021	µg/L	B140238	1400161
1407015-08	Cr	Water	T	5.81		0.158	0.474	µg/L	B140240	1400186
1407015-08	Cu	Water	T	4.11		0.042	0.126	µg/L	B140238	1400161
1407015-08	Ni	Water	T	13.1		0.526	2.11	µg/L	B140240	1400186
1407015-08	Pb	Water	T	0.281		0.006	0.026	µg/L	B140238	1400161
1407015-08	Sb	Water	T	0.519		0.011	0.042	µg/L	B140238	1400161
1407015-08	Se	Water	T	6.42		0.105	0.316	µg/L	B140239	1400167
1407015-08	Tl	Water	T	0.111		0.003	0.011	µg/L	B140238	1400161
1407015-08	Zn	Water	T	8.91		0.06	0.21	µg/L	B140238	1400161
14B0524-10 Field Blank										
1407015-09	Ag	DIW	T	0.005	U	0.005	0.021	µg/L	B140238	1400161
1407015-09	As	DIW	T	0.009	U	0.009	0.032	µg/L	B140239	1400167
1407015-09	Be	DIW	T	0.053	U	0.053	0.158	µg/L	B140238	1400161
1407015-09	Cd	DIW	T	0.007	U	0.007	0.021	µg/L	B140238	1400161
1407015-09	Cr	DIW	T	0.029	B	0.016	0.047	µg/L	B140240	1400186
1407015-09	Cu	DIW	T	0.276		0.042	0.126	µg/L	B140238	1400161
1407015-09	Ni	DIW	T	0.053	U	0.053	0.211	µg/L	B140240	1400186
1407015-09	Pb	DIW	T	0.067		0.006	0.026	µg/L	B140238	1400161
1407015-09	Sb	DIW	T	0.011	U	0.011	0.042	µg/L	B140238	1400161
1407015-09	Se	DIW	T	0.021	U	0.021	0.063	µg/L	B140239	1400167
1407015-09	Tl	DIW	T	0.003	U	0.003	0.011	µg/L	B140238	1400161
1407015-09	Zn	DIW	T	0.26		0.06	0.21	µg/L	B140238	1400161

Accuracy & Precision Summary

Batch: B140238

Lab Matrix: Water

Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140238-BS1	Laboratory Fortified Blank (1351061)						
	Ag		0.4211	0.400	µg/L	95% 75-125	
	Be		3.158	3.214	µg/L	102% 75-125	
	Cd		0.2105	0.210	µg/L	100% 75-125	
	Cu		2.105	2.135	µg/L	101% 75-125	
	Pb		0.5259	0.555	µg/L	106% 75-125	
	Sb		0.4211	0.385	µg/L	91% 75-125	
	Tl		0.2105	0.222	µg/L	106% 75-125	
	Zn		4.211	4.31	µg/L	102% 75-125	
B140238-SRM1	Certified Reference Material (1323040, NIST 1643e)						
	Ag		1.062	1.015	µg/L	96% 75-125	
	Be		13.98	13.41	µg/L	96% 75-125	
	Cd		6.568	6.332	µg/L	96% 75-125	
	Cu		22.76	22.81	µg/L	100% 75-125	
	Pb		19.63	19.29	µg/L	98% 75-125	
	Sb		58.30	52.75	µg/L	90% 75-125	
	Tl		7.445	7.277	µg/L	98% 75-125	
	Zn		78.50	80.41	µg/L	102% 75-125	
B140238-DUP1	Duplicate (1407014-01)						
	Ag	ND		ND	µg/L		N/C 20
	Be	ND		ND	µg/L		N/C 20
	Cd	0.085		0.091	µg/L		7% 20
	Cu	3.053		2.981	µg/L		2% 20
	Pb	0.072		0.069	µg/L		4% 20
	Sb	0.602		0.597	µg/L		0.8% 20
	Tl	0.154		0.153	µg/L		0.8% 20
	Zn	6.35		6.01	µg/L		5% 20

Accuracy & Precision Summary

Batch: B140238

Lab Matrix: Water

Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140238-MS1	Matrix Spike (1407014-01)						
	Ag	ND	0.4211	0.381	µg/L	90% 75-125	
	Be	ND	0.2105	0.195	µg/L	93% 75-125	
	Cd	0.085	0.2105	0.288	µg/L	96% 75-125	
	Cu	3.053	2.105	4.967	µg/L	91% 75-125	
	Pb	0.072	0.5259	0.524	µg/L	86% 75-125	
	Sb	0.602	0.2105	0.809	µg/L	99% 75-125	
	Tl	0.154	0.1053	0.242	µg/L	84% 75-125	
	Zn	6.35	10.53	15.85	µg/L	90% 75-125	
B140238-MSD1	Matrix Spike Duplicate (1407014-01)						
	Ag	ND	0.4211	0.382	µg/L	91% 75-125	0.4% 20
	Be	ND	0.2105	0.214	µg/L	101% 75-125	9% 20
	Cd	0.085	0.2105	0.295	µg/L	100% 75-125	2% 20
	Cu	3.053	2.105	5.005	µg/L	93% 75-125	0.8% 20
	Pb	0.072	0.5259	0.525	µg/L	86% 75-125	0.2% 20
	Sb	0.602	0.2105	0.800	µg/L	94% 75-125	1% 20
	Tl	0.154	0.1053	0.245	µg/L	87% 75-125	1% 20
	Zn	6.35	10.53	16.12	µg/L	93% 75-125	2% 20
B140238-DUP2	Duplicate (1407015-01)						
	Ag	0.044		0.042	µg/L		3% 20
	Be	0.070		0.070	µg/L		0.8% 20
	Cd	0.312		0.298	µg/L		4% 20
	Cu	11.47		11.47	µg/L		0.08% 20
	Pb	1.076		1.077	µg/L		0.06% 20
	Sb	0.708		0.722	µg/L		2% 20
	Tl	0.618		0.628	µg/L		2% 20
	Zn	33.23		33.27	µg/L		0.1% 20

Accuracy & Precision Summary

Batch: B140238

Lab Matrix: Water

Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140238-MS2	Matrix Spike (1407015-01)						
	Ag	0.044	0.4211	0.393	µg/L	83% 75-125	
	Be	0.070	0.2105	0.259	µg/L	90% 75-125	
	Cd	0.312	0.2105	0.498	µg/L	88% 75-125	
	Cu	11.47	2.105	13.33	µg/L	NR 75-125	
	Pb	1.076	0.5259	1.507	µg/L	82% 75-125	
	Sb	0.708	0.2105	0.898	µg/L	90% 75-125	
	Tl	0.618	0.1053	0.697	µg/L	NR 75-125	
	Zn	33.23	10.53	42.56	µg/L	89% 75-125	
B140238-MSD2	Matrix Spike Duplicate (1407015-01)						
	Ag	0.044	0.4211	0.392	µg/L	83% 75-125	0.3% 20
	Be	0.070	0.2105	0.268	µg/L	94% 75-125	3% 20
	Cd	0.312	0.2105	0.497	µg/L	88% 75-125	0.2% 20
	Cu	11.47	2.105	13.30	µg/L	NR 75-125	0.2% 20
	Pb	1.076	0.5259	1.487	µg/L	78% 75-125	1% 20
	Sb	0.708	0.2105	0.913	µg/L	97% 75-125	2% 20
	Tl	0.618	0.1053	0.702	µg/L	NR 75-125	0.7% 20
	Zn	33.23	10.53	42.68	µg/L	90% 75-125	0.3% 20

Accuracy & Precision Summary

Batch: B140239
Lab Matrix: Water
Method: EPA 1638 DRC

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140239-BS1	Laboratory Fortified Blank (1351061)						
	As		5.263	5.108	µg/L	97% 75-125	
	Se		6.316	6.030	µg/L	95% 75-125	
B140239-SRM1	Certified Reference Material (1323040, NIST 1643e)						
	As		60.45	57.51	µg/L	95% 75-125	
	Se		11.97	12.60	µg/L	105% 75-125	
B140239-DUP1	Duplicate (1407014-01)						
	As	0.804		0.850	µg/L		6% 20
	Se	9.079		9.146	µg/L		0.7% 20
B140239-MS1	Matrix Spike (1407014-01)						
	As	0.804	5.263	6.601	µg/L	110% 75-125	
	Se	9.079	10.53	21.10	µg/L	114% 75-125	
B140239-MSD1	Matrix Spike Duplicate (1407014-01)						
	As	0.804	5.263	6.383	µg/L	106% 75-125	3% 20
	Se	9.079	10.53	20.44	µg/L	108% 75-125	3% 20
B140239-DUP2	Duplicate (1407015-01)						
	As	2.027		1.866	µg/L		8% 20
	Se	7.711		7.408	µg/L		4% 20
B140239-MS2	Matrix Spike (1407015-01)						
	As	2.027	5.263	7.304	µg/L	100% 75-125	
	Se	7.711	10.53	18.78	µg/L	105% 75-125	
B140239-MSD2	Matrix Spike Duplicate (1407015-01)						
	As	2.027	5.263	7.515	µg/L	104% 75-125	3% 20
	Se	7.711	10.53	18.70	µg/L	104% 75-125	0.4% 20

Accuracy & Precision Summary

Batch: B140240
Lab Matrix: Water
Method: EPA 1638 DRC

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140240-BS1	Laboratory Fortified Blank (1351061)						
	Cr		3.162	3.554	µg/L	112% 75-125	
	Ni		4.211	4.436	µg/L	105% 75-125	
B140240-SRM1	Certified Reference Material (1323040, NIST 1643e)						
	Cr		20.40	19.32	µg/L	95% 75-125	
	Ni		62.41	61.06	µg/L	98% 75-125	
B140240-SRM2	Certified Reference Material (1352079, Fe, Ca check (SCV3 as SRM))						
	Cr		50.00	46.57	µg/L	93% 0-200	
	Ni		20.00	20.29	µg/L	101% 0-200	
B140240-DUP1	Duplicate (1407014-01)						
	Cr	6.424		6.797	µg/L		6% 20
	Ni	7.489		8.404	µg/L		12% 20
B140240-MS1	Matrix Spike (1407014-01)						
	Cr	6.424	10.54	18.01	µg/L	110% 75-125	
	Ni	7.489	52.63	63.97	µg/L	107% 75-125	
B140240-MSD1	Matrix Spike Duplicate (1407014-01)						
	Cr	6.424	10.54	17.49	µg/L	105% 75-125	3% 20
	Ni	7.489	52.63	60.21	µg/L	100% 75-125	6% 20
B140240-DUP2	Duplicate (1407015-01)						
	Cr	20.16		18.94	µg/L		6% 20
	Ni	25.48		22.99	µg/L		10% 20
B140240-MS2	Matrix Spike (1407015-01)						
	Cr	20.16	10.54	29.74	µg/L	91% 75-125	
	Ni	25.48	52.63	75.99	µg/L	96% 75-125	

Project ID: AAL-DB1301
PM: Lydia Greaves



BRL Report 1407015
Client PM: Robbie Phillips
Client PO: 130903RP-1

Accuracy & Precision Summary

Batch: B140240
Lab Matrix: Water
Method: EPA 1638 DRC

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140240-MSD2	Matrix Spike Duplicate (1407015-01)						
	Cr	20.16	10.54	29.73	µg/L	91% 75-125	0.03% 20
	Ni	25.48	52.63	78.90	µg/L	102% 75-125	4% 20

Method Blanks & Reporting Limits

Batch: B140238
Matrix: Water
Method: EPA 1638
Analyte: Ag 107

Sample	Result	Units		
B140238-BLK1	-0.003	µg/L		
B140238-BLK2	-0.003	µg/L		
B140238-BLK3	-0.003	µg/L		
B140238-BLK4	-0.003	µg/L		
Average: -0.003		Standard Deviation: 0.000	MDL: 0.005	
Limit: 0.021		Limit: 0.005	MRL: 0.021	

Analyte: Be

Sample	Result	Units		
B140238-BLK1	-0.012	µg/L		
B140238-BLK2	-0.014	µg/L		
B140238-BLK3	-0.012	µg/L		
B140238-BLK4	-0.013	µg/L		
Average: -0.013		Standard Deviation: 0.001	MDL: 0.053	
Limit: 0.158		Limit: 0.053	MRL: 0.158	

Analyte: Cd 114

Sample	Result	Units		
B140238-BLK1	-0.002	µg/L		
B140238-BLK2	-0.002	µg/L		
B140238-BLK3	-0.002	µg/L		
B140238-BLK4	-0.003	µg/L		
Average: -0.002		Standard Deviation: 0.001	MDL: 0.007	
Limit: 0.021		Limit: 0.007	MRL: 0.021	

Method Blanks & Reporting Limits

Analyte: Cu 63

Sample	Result	Units		
B140238-BLK1	-0.013	µg/L		
B140238-BLK2	-0.010	µg/L		
B140238-BLK3	-0.009	µg/L		
B140238-BLK4	-0.009	µg/L		
Average: -0.010		Standard Deviation: 0.002	MDL: 0.042	
Limit: 0.126		Limit: 0.042	MRL: 0.126	

Analyte: Pb

Sample	Result	Units		
B140238-BLK1	-0.002	µg/L		
B140238-BLK2	-0.002	µg/L		
B140238-BLK3	-0.002	µg/L		
B140238-BLK4	-0.001	µg/L		
Average: -0.002		Standard Deviation: 0.001	MDL: 0.006	
Limit: 0.026		Limit: 0.006	MRL: 0.026	

Analyte: Sb

Sample	Result	Units		
B140238-BLK1	-0.0006	µg/L		
B140238-BLK2	-0.0008	µg/L		
B140238-BLK3	-0.0008	µg/L		
B140238-BLK4	-0.0008	µg/L		
Average: -0.001		Standard Deviation: 0.000	MDL: 0.011	
Limit: 0.042		Limit: 0.011	MRL: 0.042	

Analyte: Ti

Sample	Result	Units		
B140238-BLK1	-0.001	µg/L		
B140238-BLK2	-0.001	µg/L		
B140238-BLK3	-0.002	µg/L		
B140238-BLK4	-0.002	µg/L		
Average: -0.002		Standard Deviation: 0.001	MDL: 0.003	
Limit: 0.011		Limit: 0.003	MRL: 0.011	

Method Blanks & Reporting Limits

Analyte: Zn 66

Sample	Result	Units			
B140238-BLK1	0.005	µg/L			
B140238-BLK2	0.01	µg/L			
B140238-BLK3	0.01	µg/L			
B140238-BLK4	0.004	µg/L			
Average: 0.01		Standard Deviation: 0.00		MDL: 0.06	
Limit: 0.21		Limit: 0.06		MRL: 0.21	

Method Blanks & Reporting Limits

Batch: B140239
Matrix: Water
Method: EPA 1638 DRC
Analyte: As 91

Sample	Result	Units		
B140239-BLK1	0.002	µg/L		
B140239-BLK2	0.002	µg/L		
B140239-BLK3	0.002	µg/L		
B140239-BLK4	0.0006	µg/L		
Average: 0.002		Standard Deviation: 0.001	MDL: 0.009	
Limit: 0.032		Limit: 0.009	MRL: 0.032	

Analyte: Se 78

Sample	Result	Units		
B140239-BLK1	0.040	µg/L		
B140239-BLK2	0.018	µg/L		
B140239-BLK3	0.023	µg/L		
B140239-BLK4	0.011	µg/L		
Average: 0.023		Standard Deviation: 0.012	MDL: 0.021	
Limit: 0.063		Limit: 0.021	MRL: 0.063	

Method Blanks & Reporting Limits

Batch: B140240
Matrix: Water
Method: EPA 1638 DRC
Analyte: Cr 52

Sample	Result	Units		
B140240-BLK1	0.002	µg/L		
B140240-BLK2	0.002	µg/L		
B140240-BLK3	0.002	µg/L		
B140240-BLK4	0.003	µg/L		
Average: 0.002		Standard Deviation: 0.001	MDL: 0.016	
Limit: 0.047		Limit: 0.016	MRL: 0.047	

Analyte: Ni 62

Sample	Result	Units		
B140240-BLK1	-0.002	µg/L		
B140240-BLK2	-0.011	µg/L		
B140240-BLK3	-0.007	µg/L		
B140240-BLK4	-0.009	µg/L		
Average: -0.007		Standard Deviation: 0.004	MDL: 0.053	
Limit: 0.211		Limit: 0.053	MRL: 0.211	

Sample Containers

Lab ID: 1407015-01 Sample: 14B0524-01 Pond 9 EFF M-002			Report Matrix: Water Sample Type: Sample		Collected: 02/06/2014 Received: 02/11/2014	
Des	Container	Size	Lot	Preservation	P-Lot	pH Ship. Cont.
A	Bottle Glass	500mL	not provided	0.1% HNO3 (BRL)	1350086	<2 Cooler
Lab ID: 1407015-02 Sample: 14B0524-02 Pond 17 EFF M-004			Report Matrix: Water Sample Type: Sample		Collected: 02/06/2014 Received: 02/11/2014	
Des	Container	Size	Lot	Preservation	P-Lot	pH Ship. Cont.
A	Bottle Glass	500mL	not provided	0.1% HNO3 (BRL)	1350086	<2 Cooler
Lab ID: 1407015-03 Sample: 14B0524-03 Pond 20 EFF M-005			Report Matrix: Water Sample Type: Sample		Collected: 02/06/2014 Received: 02/11/2014	
Des	Container	Size	Lot	Preservation	P-Lot	pH Ship. Cont.
A	Bottle Glass	500mL	not provided	0.1% HNO3 (BRL)	1350086	<2 Cooler
Lab ID: 1407015-04 Sample: 14B0524-05 Pond 9 DN R-002B			Report Matrix: Water Sample Type: Sample		Collected: 02/06/2014 Received: 02/11/2014	
Des	Container	Size	Lot	Preservation	P-Lot	pH Ship. Cont.
A	Bottle Glass	500mL	not provided	0.1% HNO3 (BRL)	1350086	<2 Cooler
Lab ID: 1407015-05 Sample: 14B0524-06 Pond 17 DN R-002D			Report Matrix: Water Sample Type: Sample		Collected: 02/06/2014 Received: 02/11/2014	
Des	Container	Size	Lot	Preservation	P-Lot	pH Ship. Cont.
A	Bottle Glass	500mL	not provided	0.1% HNO3 (BRL)	1350086	<2 Cooler
Lab ID: 1407015-06 Sample: 14B0524-07 Pond 20 DN/21			Report Matrix: Water Sample Type: Sample		Collected: 02/06/2014 Received: 02/11/2014	
Des	Container	Size	Lot	Preservation	P-Lot	pH Ship. Cont.
A	Bottle Glass	500mL	not provided	0.1% HNO3 (BRL)	1350086	<2 Cooler

Project ID: AAL-DB1301
PM: Lydia Greaves



BRL Report 1407015
Client PM: Robbie Phillips
Client PO: 130903RP-1

Sample Containers

Lab ID: 1407015-07			Report Matrix: Water			Collected: 02/06/2014		
Sample: 14B0524-08 Downstream			Sample Type: Sample			Received: 02/11/2014		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.	
A	Bottle Glass	500mL	not provided	0.1% HNO3 (BRL)	1350086	<2	Cooler	
Lab ID: 1407015-08			Report Matrix: Water			Collected: 02/06/2014		
Sample: 14B0524-09 Duplicate			Sample Type: Field Duplicate			Received: 02/11/2014		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.	
A	Bottle Glass	500mL	not provided	0.1% HNO3 (BRL)	1350086	<2	Cooler	
Lab ID: 1407015-09			Report Matrix: DIW			Collected: 02/06/2014		
Sample: 14B0524-10 Field Blank			Sample Type: Field Blank			Received: 02/11/2014		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.	
A	Bottle Glass	500mL	not provided	0.1% HNO3 (BRL)	1350086	<2	Cooler	

Shipping Containers

Cooler

Received: February 11, 2014 9:20
Tracking No: 1Z8942500149988380 via UPS
Coolant Type: Ice
Temperature: 0.4 °C

Description: Cooler
Damaged in transit? No
Returned to client? No

Custody seals present? No
Custody seals intact? No
COC present? Yes

SUBCONTRACT ORDER
Alpha Analytical Laboratories, Inc.
14B0524

1407015 BRL Report 1407015

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: Robbie C. Phillips

RECEIVING LABORATORY:

Brooks Rand Labs, LLC
3958 6th Avenue NW
Seattle, WA 98107
Phone : (206) 632-6206
Fax: (206) 632-6017
Terms: Net 30

Analysis	Due	Expires	Comments
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14B0524-01 Pond 9 EFF M-002 [Water] Sampled 02/06/14 12:10 Pacific

1638 Ag Total ICPMS	02/24/14 12:00	08/05/14 12:10
1638 As Total ICPMS	02/24/14 12:00	08/05/14 12:10
1638 Be Total ICPMS	02/24/14 12:00	08/05/14 12:10
1638 Cd Total ICPMS	02/24/14 12:00	08/05/14 12:10
1638 Cr Total ICPMS	02/24/14 12:00	08/05/14 12:10
1638 Ni Total ICPMS	02/24/14 12:00	08/05/14 12:10
1638 Pb Total ICPMS	02/24/14 12:00	08/05/14 12:10
1638 Sb Total ICPMS	02/24/14 12:00	08/05/14 12:10
1638 Se Total ICPMS	02/24/14 12:00	08/05/14 12:10
1638 Tl Total ICPMS	02/24/14 12:00	08/05/14 12:10
1638 Zn Total ICPMS	02/24/14 12:00	08/05/14 12:10
1638 Cu Total ICPMS	02/24/14 12:00	08/05/14 12:10

Containers Supplied:

500ml Glass - Unpreserve

14B0524-02 Pond 17 EFF M-004 [Water] Sampled 02/06/14 12:50 Pacific


1638 Ag Total ICPMS	02/24/14 12:00	08/05/14 12:50
1638 Sb Total ICPMS	02/24/14 12:00	08/05/14 12:50
1638 Ni Total ICPMS	02/24/14 12:00	08/05/14 12:50
1638 Zn Total ICPMS	02/24/14 12:00	08/05/14 12:50
1638 Cu Total ICPMS	02/24/14 12:00	08/05/14 12:50
1638 Cr Total ICPMS	02/24/14 12:00	08/05/14 12:50
1638 Cd Total ICPMS	02/24/14 12:00	08/05/14 12:50
1638 Be Total ICPMS	02/24/14 12:00	08/05/14 12:50
1638 Pb Total ICPMS	02/24/14 12:00	08/05/14 12:50
1638 Tl Total ICPMS	02/24/14 12:00	08/05/14 12:50
1638 As Total ICPMS	02/24/14 12:00	08/05/14 12:50
1638 Se Total ICPMS	02/24/14 12:00	08/05/14 12:50

Containers Supplied:

500ml Glass - Unpreserve


Released By

2-7-14
Date


Received By

2/11/14 0920
Date

Released By

Date

Received By

Date

SUBCONTRACT ORDER
Alpha Analytical Laboratories, Inc.
14B0524

BRL Report 1407015

Analysis	Due	Expires	Comments
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14B0524-03 Pond 20 EFF M-005 [Water] Sampled 02/06/14 08:30 Pacific

1638 Zn Total ICPMS	02/24/14 12:00	08/05/14 08:30
1638 Ag Total ICPMS	02/24/14 12:00	08/05/14 08:30
1638 As Total ICPMS	02/24/14 12:00	08/05/14 08:30
1638 Be Total ICPMS	02/24/14 12:00	08/05/14 08:30
1638 Cd Total ICPMS	02/24/14 12:00	08/05/14 08:30
1638 Cr Total ICPMS	02/24/14 12:00	08/05/14 08:30
1638 Cu Total ICPMS	02/24/14 12:00	08/05/14 08:30
1638 Ni Total ICPMS	02/24/14 12:00	08/05/14 08:30
1638 Pb Total ICPMS	02/24/14 12:00	08/05/14 08:30
1638 Sb Total ICPMS	02/24/14 12:00	08/05/14 08:30
1638 Se Total ICPMS	02/24/14 12:00	08/05/14 08:30
1638 Tl Total ICPMS	02/24/14 12:00	08/05/14 08:30

Containers Supplied:


500ml Glass - Unpreserve.

14B0524-05 Pond 9 DN R-002B [Water] Sampled 02/06/14 12:30 Pacific

1638 As Total ICPMS	02/24/14 12:00	08/05/14 12:30
1638 Sb Total ICPMS	02/24/14 12:00	08/05/14 12:30
1638 Pb Total ICPMS	02/24/14 12:00	08/05/14 12:30
1638 Ni Total ICPMS	02/24/14 12:00	08/05/14 12:30
1638 Cu Total ICPMS	02/24/14 12:00	08/05/14 12:30
1638 Cr Total ICPMS	02/24/14 12:00	08/05/14 12:30
1638 Cd Total ICPMS	02/24/14 12:00	08/05/14 12:30
1638 Se Total ICPMS	02/24/14 12:00	08/05/14 12:30
1638 Be Total ICPMS	02/24/14 12:00	08/05/14 12:30
1638 Ag Total ICPMS	02/24/14 12:00	08/05/14 12:30
1638 Zn Total ICPMS	02/24/14 12:00	08/05/14 12:30
1638 Tl Total ICPMS	02/24/14 12:00	08/05/14 12:30

Containers Supplied:

500ml Glass - Unpreserve.

	2-7-14	Corin Wright	2/11/14 0920
Released By	Date	Received By	Date

Released By	Date	Received By	Date
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SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

BRL Report 1407015

14B0524

Analysis	Due	Expires	Comments
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14B0524-06 Pond 17 DN R-002D [Water] Sampled 02/06/14 13:05 Pacific

1638 Cu Total ICPMS	02/24/14 12:00	08/05/14 13:05
1638 Sb Total ICPMS	02/24/14 12:00	08/05/14 13:05
1638 Se Total ICPMS	02/24/14 12:00	08/05/14 13:05
1638 Tl Total ICPMS	02/24/14 12:00	08/05/14 13:05
1638 Zn Total ICPMS	02/24/14 12:00	08/05/14 13:05
1638 Ni Total ICPMS	02/24/14 12:00	08/05/14 13:05
1638 Cd Total ICPMS	02/24/14 12:00	08/05/14 13:05
1638 Be Total ICPMS	02/24/14 12:00	08/05/14 13:05
1638 As Total ICPMS	02/24/14 12:00	08/05/14 13:05
1638 Ag Total ICPMS	02/24/14 12:00	08/05/14 13:05
1638 Cr Total ICPMS	02/24/14 12:00	08/05/14 13:05
1638 Pb Total ICPMS	02/24/14 12:00	08/05/14 13:05

Containers Supplied:

500ml Glass - Unpreserve

14B0524-07 Pond 20 DN/21 [Water] Sampled 02/06/14 08:50 Pacific

1638 Se Total ICPMS	02/24/14 12:00	08/05/14 08:50
1638 Ag Total ICPMS	02/24/14 12:00	08/05/14 08:50
1638 As Total ICPMS	02/24/14 12:00	08/05/14 08:50
1638 Be Total ICPMS	02/24/14 12:00	08/05/14 08:50
1638 Cd Total ICPMS	02/24/14 12:00	08/05/14 08:50
1638 Cr Total ICPMS	02/24/14 12:00	08/05/14 08:50
1638 Cu Total ICPMS	02/24/14 12:00	08/05/14 08:50
1638 Ni Total ICPMS	02/24/14 12:00	08/05/14 08:50
1638 Sb Total ICPMS	02/24/14 12:00	08/05/14 08:50
1638 Tl Total ICPMS	02/24/14 12:00	08/05/14 08:50
1638 Zn Total ICPMS	02/24/14 12:00	08/05/14 08:50
1638 Pb Total ICPMS	02/24/14 12:00	08/05/14 08:50

Containers Supplied:

500ml Glass - Unpreserve

Released By

Date

Received By

Date

Released By

Date

Received By

Date

22 of 24

Page 3 of 5

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

BRL Report 1407015

14B0524

Analysis	Due	Expires	Comments
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14B0524-08 Downstream [Water] Sampled 02/06/14 13:40 Pacific

1638 Ni Total ICPMS	02/24/14 12:00	08/05/14 13:40
1638 Sb Total ICPMS	02/24/14 12:00	08/05/14 13:40
1638 Cr Total ICPMS	02/24/14 12:00	08/05/14 13:40
1638 Zn Total ICPMS	02/24/14 12:00	08/05/14 13:40
1638 Ag Total ICPMS	02/24/14 12:00	08/05/14 13:40
1638 Se Total ICPMS	02/24/14 12:00	08/05/14 13:40
1638 Pb Total ICPMS	02/24/14 12:00	08/05/14 13:40
1638 Cu Total ICPMS	02/24/14 12:00	08/05/14 13:40
1638 Cd Total ICPMS	02/24/14 12:00	08/05/14 13:40
1638 Be Total ICPMS	02/24/14 12:00	08/05/14 13:40
1638 As Total ICPMS	02/24/14 12:00	08/05/14 13:40
1638 Tl Total ICPMS	02/24/14 12:00	08/05/14 13:40

Containers Supplied:



500ml Glass - Unpreserve

14B0524-09 Duplicate [Water] Sampled 02/06/14 13:50 Pacific

1638 Zn Total ICPMS	02/24/14 12:00	08/05/14 13:50
1638 Cu Total ICPMS	02/24/14 12:00	08/05/14 13:50
1638 Tl Total ICPMS	02/24/14 12:00	08/05/14 13:50
1638 Se Total ICPMS	02/24/14 12:00	08/05/14 13:50
1638 Sb Total ICPMS	02/24/14 12:00	08/05/14 13:50
1638 Ni Total ICPMS	02/24/14 12:00	08/05/14 13:50
1638 Cd Total ICPMS	02/24/14 12:00	08/05/14 13:50
1638 Be Total ICPMS	02/24/14 12:00	08/05/14 13:50
1638 As Total ICPMS	02/24/14 12:00	08/05/14 13:50
1638 Ag Total ICPMS	02/24/14 12:00	08/05/14 13:50
1638 Cr Total ICPMS	02/24/14 12:00	08/05/14 13:50
1638 Pb Total ICPMS	02/24/14 12:00	08/05/14 13:50

Containers Supplied:

500ml Glass - Unpreserve


Released By2-7-14
Date
Received By2/11/14 0920
Date

Released By

Date

Received By

Date

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

BRL Report 1407015

14B0524

Analysis	Due	Expires	Comments
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14B0524-10 Field Blank [Water] Sampled 02/06/14 13:30 Pacific

1638 Cd Total ICPMS	02/24/14 12:00	08/05/14 13:30
1638 Tl Total ICPMS	02/24/14 12:00	08/05/14 13:30
1638 Se Total ICPMS	02/24/14 12:00	08/05/14 13:30
1638 Sb Total ICPMS	02/24/14 12:00	08/05/14 13:30
1638 Zn Total ICPMS	02/24/14 12:00	08/05/14 13:30
1638 Pb Total ICPMS	02/24/14 12:00	08/05/14 13:30
1638 Ni Total ICPMS	02/24/14 12:00	08/05/14 13:30
1638 Cr Total ICPMS	02/24/14 12:00	08/05/14 13:30
1638 Be Total ICPMS	02/24/14 12:00	08/05/14 13:30
1638 As Total ICPMS	02/24/14 12:00	08/05/14 13:30
1638 Ag Total ICPMS	02/24/14 12:00	08/05/14 13:30
1638 Cu Total ICPMS	02/24/14 12:00	08/05/14 13:30

Containers Supplied:

500ml Glass - Unpreserve

☐ Report to State

System Name: _____

Employed by: _____

User ID: _____

Sampler: _____

System Number: _____

+QC
+J-Flagr

Released By

Date

Received By

Date

Released By

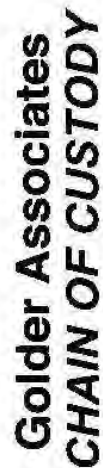
Date

Received By

Date

24 of 24

Page 5 of 5



1480524

Page of

Quotation No. PO 4500554289

[illegible]

white: lab copy yellow: project file

Sean Foley@Alpha Labs

From: "Robbie Phillips" <Robbie@sampletraps.com>
To: "Foley Sean" <sfoley@alpha-labs.com>
Sent: Monday, February 10, 2014 7:56 AM
Attach: 14B0524 02 07 14 1100_02.pdf
Subject: Fw: WO 14B0524 Lehigh analyses from 2/6 to cancel
From: DeVillier, Kimberly
Sent: Friday, February 07, 2014 3:50 PM
To: Robbie Phillips
Cc: Wegmann, George ; Walter, David (Sunnyvale)
Subject: WO 14B0524 Lehigh analyses from 2/6 to cancel

Hi, Robbie. For WO 14B0524 from Lehigh sampled 2/6, please cancel the following analyses:

TSS for samples:

- "14B0524-04 Pond 9 UP R-001B" ✓
- "14B0524-05 Pond 9 DN R-002B" ✓
- "14B0524-06 Pond 17 DN R-002D" ✓
- "14B0524-07 Pond 20 DN/21" ✓
- "14B0524-08 Downstream" ✓

O&G for sample "14B0524-08 Downstream" ✓

Thank you.

Kimberly DeVillier | Geologist | **Golder Associates Inc.**
425 Lakeside Drive, Sunnyvale, California, USA 94085
T: +1 (408) 220-9223 | D: +1 (408) 220 9245 | F: +1 (408) 220-9224 | E: Kimberly_DeVillier@golder.com |
www.golder.com

Work Safe, Home Safe

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Please consider the environment before printing this email.

2/10/2014



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

ELAP Certificate Numbers 1551 and 2728

28 February 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14B1000

Enclosed are the results of analyses for samples received by the laboratory on 02/12/14 20:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/28/14 10:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 EFF M-002	14B1000-01	Water	02/12/14 10:45	02/12/14 20:50
Pond 9 UP R-001B	14B1000-02	Water	02/12/14 10:55	02/12/14 20:50
Pond 9 DN R-002B	14B1000-03	Water	02/12/14 11:00	02/12/14 20:50
Pond 17 EFF M-004	14B1000-04	Water	02/12/14 11:20	02/12/14 20:50
Pond 17 DN R-002D	14B1000-05	Water	02/12/14 11:30	02/12/14 20:50



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/28/14 10:07

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 EFF M-002 (14B1000-01) Water	Sampled: 02/12/14 10:45	Received: 02/12/14 20:50								
Total Dissolved Solids	730	5.0	10	mg/l	1	AB41923	02/19/14 09:30	02/21/14 14:00	SM2540C	U
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AB41858	02/13/14 14:00	02/13/14 17:00	SM2540F	
Pond 9 UP R-001B (14B1000-02) Water	Sampled: 02/12/14 10:55	Received: 02/12/14 20:50								
Total Dissolved Solids	1400	5.0	10	mg/l	1	AB41923	02/19/14 09:30	02/21/14 14:00	SM2540C	
Pond 9 DN R-002B (14B1000-03) Water	Sampled: 02/12/14 11:00	Received: 02/12/14 20:50								
Total Dissolved Solids	770	5.0	10	mg/l	1	AB41923	02/19/14 09:30	02/21/14 14:00	SM2540C	
Pond 17 EFF M-004 (14B1000-04) Water	Sampled: 02/12/14 11:20	Received: 02/12/14 20:50								
Total Dissolved Solids	1800	5.0	10	mg/l	1	AB41923	02/19/14 09:30	02/21/14 14:00	SM2540C	U
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AB41858	02/13/14 14:00	02/13/14 17:00	SM2540F	
Pond 17 DN R-002D (14B1000-05) Water	Sampled: 02/12/14 11:30	Received: 02/12/14 20:50								
Total Dissolved Solids	970	5.0	10	mg/l	1	AB41923	02/19/14 09:30	02/21/14 14:00	SM2540C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
02/28/14 10:07

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 EFF M-002 (14B1000-01) Water Sampled: 02/12/14 10:45 Received: 02/12/14 20:50										
Chloride	150	0.75	12	mg/l	25	AB41957	02/19/14 16:00	02/19/14 23:09	EPA 300.0	
Pond 9 UP R-001B (14B1000-02) Water Sampled: 02/12/14 10:55 Received: 02/12/14 20:50										
Chloride	120	0.75	12	mg/l	25	AB41957	02/19/14 16:00	02/19/14 23:54	EPA 300.0	
Pond 9 DN R-002B (14B1000-03) Water Sampled: 02/12/14 11:00 Received: 02/12/14 20:50										
Chloride	150	0.75	12	mg/l	25	AB41957	02/19/14 16:00	02/20/14 00:09	EPA 300.0	
Pond 17 EFF M-004 (14B1000-04) Water Sampled: 02/12/14 11:20 Received: 02/12/14 20:50										
Chloride	120	1.5	25	mg/l	50	AB41957	02/19/14 16:00	02/20/14 00:24	EPA 300.0	
Pond 17 DN R-002D (14B1000-05) Water Sampled: 02/12/14 11:30 Received: 02/12/14 20:50										
Chloride	150	0.75	12	mg/l	25	AB41957	02/19/14 16:00	02/20/14 00:39	EPA 300.0	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/28/14 10:07

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AB41923 - General Preparation

Blank (AB41923-BLK1)

Prepared: 02/19/14 Analyzed: 02/21/14

Total Dissolved Solids	ND	5.0	10	mg/l						U
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Duplicate (AB41923-DUP1)

Source: 14B1000-01

Prepared: 02/19/14 Analyzed: 02/21/14

Total Dissolved Solids	796	5.0	10	mg/l		732		8.38	30	
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Duplicate (AB41923-DUP2)

Source: 14B1003-03

Prepared: 02/19/14 Analyzed: 02/21/14

Total Dissolved Solids	294	5.0	10	mg/l		279		5.24	30	
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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/28/14 10:07

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AB41957 - General Preparation

Blank (AB41957-BLK1)

Prepared & Analyzed: 02/19/14

Chloride	ND	0.030	0.50	mg/l							U
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LCS (AB41957-BS1)

Prepared & Analyzed: 02/19/14

Chloride	11.3	0.030	0.50	mg/l	11.1		101	90-110			
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Duplicate (AB41957-DUP1)

Source: 14B1314-04

Prepared: 02/19/14 Analyzed: 02/20/14

Chloride	6.50	0.030	0.50	mg/l		6.46			0.664	20	
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Matrix Spike (AB41957-MS1)

Source: 14B1314-04

Prepared: 02/19/14 Analyzed: 02/20/14

Chloride	16.0	0.15	2.5	mg/l	11.1	6.46	85.9	80-120			
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Matrix Spike Dup (AB41957-MSD1)

Source: 14B1314-04

Prepared: 02/19/14 Analyzed: 02/20/14

Chloride	15.9	0.15	2.5	mg/l	11.1	6.46	85.3	80-120	0.452	20	
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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/28/14 10:07

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates CHAIN OF CUSTODY

14B1000

Page 1 of 1

Quotation No. 90# 4506534289

PROJECT NO.:		SITE NAME:		ANALYSES		EDD required?		EDF required?	
063-7109-914		Lehigh St. permit		Tot Set Mat TOS, Chloride		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
SAMPLER(S):		CONTRACT LABORATORY:		CONTAINER INFO					
David Walter (printed)		Alpha Standard		Type/Vol.					
				Filter					
				Preserv.					
TURN-AROUND TIME:		Collection		Matrix		Depth		Remarks	
		Date		Time					
Sample I.D.	Lab I.D.	Date		Time		Depth		Remarks	
Pond 9 EFF M-002	2-12-14	1045		W					
Pond 9 UP R-001B	1055								
Pond 9 ON R-002B	1100								
Pond 17 EFF M-004	1120								
Pond 17 ON R-002D	1130								

Relinquished by: (signature)		Received by: (signature)		Date/Time:	
David C. Walter		Jim Johnson		2-12-14 16:10	
Relinquished by: (signature)		Received by: (signature)		Date/Time:	
Jim Johnson		Walter		2-12-14 1800	
Relinquished by: (signature)		Received by: (signature)		Date/Time:	
Walter		H.B. Lamm		2-12-14 2050	

SEND RESULTS TO:
Attn: George Wegmann, Greg Knapp,
chow kip
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224



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ELAP Certificate Numbers 1551 and 2728

26 February 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14B1064

Enclosed are the results of analyses for samples received by the laboratory on 02/13/14 21:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 14:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 Composite	14B1064-01	Water	02/13/14 10:15	02/13/14 21:40
Pond 17 Composite	14B1064-02	Water	02/13/14 10:35	02/13/14 21:40



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 14:09

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 9 Composite (14B1064-01) Water	Sampled: 02/13/14 10:15	Received: 02/13/14 21:40									
Total Suspended Solids	16	0.30	0.50	mg/l	1	AB41942	02/19/14 10:45	02/19/14 16:45	SM2540D		
Pond 17 Composite (14B1064-02) Water	Sampled: 02/13/14 10:35	Received: 02/13/14 21:40									
Total Suspended Solids	3.0	0.30	0.50	mg/l	1	AB41942	02/19/14 10:45	02/19/14 16:45	SM2540D		



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 14:09

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AB41942 - General Preparation

Blank (AB41942-BLK1)

Prepared & Analyzed: 02/19/14

Total Suspended Solids	0.400	0.30	0.50	mg/l							J
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Duplicate (AB41942-DUP1)

Source: 14B1239-02

Prepared & Analyzed: 02/19/14

Total Suspended Solids	380	0.30	0.50	mg/l		360			5.41	30	
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Duplicate (AB41942-DUP2)

Source: 14B1242-01

Prepared & Analyzed: 02/19/14

Total Suspended Solids	630	0.30	0.50	mg/l		680			7.63	30	
------------------------	-----	------	------	------	--	-----	--	--	------	----	--



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Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

02/26/14 14:09

Notes and Definitions

J Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates **CHAIN OF CUSTODY**

PROJECT NO.: 063-7109-914 SITE NAME: Composite Lehigh STE Permit ANALYSES

SAMPLER(S): David Walter (printed) David C. Walt (signature) Container Info: Alpha Standard

CONTRACT LABORATORY: Alpha Standard

TURN-AROUND TIME: Standard

Sample I.D.: Pond 9 Composite 3-13-14 1015 W Pond 17 Composite 4 1035 W

Collection Date Time Matrix Depth Type/Vol. Filter Preserv. IL N -

Cont. Qty. 1 1

Remarks

EDD required? Yes No

EDF required? Yes No

SEND RESULTS TO: Attn: George Weymann, Greg Knapp, Chien Kip Golder Associates Inc. 425 Lakeside Drive Sunnyvale, CA 94085 Phone (408) 220-9223 Fax (408) 220-9224

Date/Time: 2/13/14 14:46 Date/Time: 2-13-14 12:12 Date/Time: 2-13-14 2:10

Received by (signature): David C. Walt Received by (signature): Jim Johnson Received by (signature): David C. Walt

Relinquished by (signature): David C. Walt Relinquished by (signature): Jim Johnson Relinquished by (signature): David C. Walt



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ELAP Certificate Numbers 1551 and 2728

06 March 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14B1425

Enclosed are the results of analyses for samples received by the laboratory on 02/20/14 21:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/06/14 14:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 Eff M-002	14B1425-01	Water	02/20/14 12:30	02/20/14 21:40
Pond 9 UP R-001B	14B1425-02	Water	02/20/14 12:40	02/20/14 21:40
Pond 9 DN R-002B	14B1425-03	Water	02/20/14 12:50	02/20/14 21:40
Pond 17 Eff M-004	14B1425-04	Water	02/20/14 13:25	02/20/14 21:40
Pond 17 DN R-002D	14B1425-05	Water	02/20/14 13:35	02/20/14 21:40



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/06/14 14:45

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond 9 Eff M-002 (14B1425-01) Water Sampled: 02/20/14 12:30 Received: 02/20/14 21:40										
Total Dissolved Solids	1200	5.0	10	mg/l	1	AB42518	02/25/14 08:30	03/03/14 13:15	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AB42133	02/21/14 13:00	02/21/14 16:10	SM2540F	U
Pond 9 UP R-001B (14B1425-02) Water Sampled: 02/20/14 12:40 Received: 02/20/14 21:40										
Total Dissolved Solids	1800	5.0	10	mg/l	1	AB42518	02/25/14 08:30	03/03/14 13:15	SM2540C	
Pond 9 DN R-002B (14B1425-03) Water Sampled: 02/20/14 12:50 Received: 02/20/14 21:40										
Total Dissolved Solids	1700	5.0	10	mg/l	1	AB42518	02/25/14 08:30	03/03/14 13:15	SM2540C	
Pond 17 Eff M-004 (14B1425-04) Water Sampled: 02/20/14 13:25 Received: 02/20/14 21:40										
Total Dissolved Solids	2300	5.0	10	mg/l	1	AB42518	02/25/14 08:30	03/03/14 13:15	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AB42133	02/21/14 13:00	02/21/14 16:10	SM2540F	U
Pond 17 DN R-002D (14B1425-05) Water Sampled: 02/20/14 13:35 Received: 02/20/14 21:40										
Total Dissolved Solids	2000	5.0	10	mg/l	1	AB42518	02/25/14 08:30	03/03/14 13:15	SM2540C	

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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
03/06/14 14:45

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 9 Eff M-002 (14B1425-01) Water Sampled: 02/20/14 12:30 Received: 02/20/14 21:40										
Chloride	93	0.75	12	mg/l	25	AB42810	02/28/14 09:30	02/28/14 13:14	EPA 300.0	
Pond 9 UP R-001B (14B1425-02) Water Sampled: 02/20/14 12:40 Received: 02/20/14 21:40										
Chloride	130	1.5	25	mg/l	50	AB42810	02/28/14 09:30	02/28/14 13:30	EPA 300.0	
Pond 9 DN R-002B (14B1425-03) Water Sampled: 02/20/14 12:50 Received: 02/20/14 21:40										
Chloride	110	1.5	25	mg/l	50	AB42810	02/28/14 09:30	02/28/14 13:45	EPA 300.0	
Pond 17 Eff M-004 (14B1425-04) Water Sampled: 02/20/14 13:25 Received: 02/20/14 21:40										
Chloride	130	1.5	25	mg/l	50	AB42810	02/28/14 09:30	02/28/14 14:00	EPA 300.0	
Pond 17 DN R-002D (14B1425-05) Water Sampled: 02/20/14 13:35 Received: 02/20/14 21:40										
Chloride	140	1.5	25	mg/l	50	AB42810	02/28/14 09:30	02/28/14 14:41	EPA 300.0	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/06/14 14:45

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AB42518 - General Preparation

Blank (AB42518-BLK1)

Prepared: 02/25/14 Analyzed: 03/03/14

Total Dissolved Solids	ND	5.0	10	mg/l						U
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Duplicate (AB42518-DUP1)

Source: 14B1425-01

Prepared: 02/25/14 Analyzed: 03/03/14

Total Dissolved Solids	1160	5.0	10	mg/l		1190		2.72	30	
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Duplicate (AB42518-DUP2)

Source: 14B1495-08

Prepared: 02/25/14 Analyzed: 03/03/14

Total Dissolved Solids	676	5.0	10	mg/l		668		1.19	30	
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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
03/06/14 14:45

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AB42810 - General Preparation

Blank (AB42810-BLK1)

Prepared & Analyzed: 02/28/14

Chloride	ND	0.030	0.50	mg/l							U
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LCS (AB42810-BS1)

Prepared & Analyzed: 02/28/14

Chloride	9.57	0.030	0.50	mg/l	10.0		95.7	90-110			
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Duplicate (AB42810-DUP1)

Source: 14B1609-01

Prepared & Analyzed: 02/28/14

Chloride	20.3	0.060	1.0	mg/l		20.3			0.178	20	
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Matrix Spike (AB42810-MS1)

Source: 14B1609-01

Prepared & Analyzed: 02/28/14

Chloride	30.2	0.060	1.0	mg/l	11.1	20.3	89.3	80-120			
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Matrix Spike (AB42810-MS2)

Source: 14B1947-01

Prepared & Analyzed: 02/28/14

Chloride	17.8	0.15	2.5	mg/l	11.1	7.73	90.8	80-120			
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Matrix Spike Dup (AB42810-MSD1)

Source: 14B1609-01

Prepared & Analyzed: 02/28/14

Chloride	30.2	0.060	1.0	mg/l	11.1	20.3	89.2	80-120	0.0515	20	
----------	------	-------	-----	------	------	------	------	--------	--------	----	--



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/06/14 14:45

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates CHAIN OF CUSTODY

14B1425

Page 1 of 1

Quotation No. 10# 450554289

PROJECT NO.:		SITE NAME:		ANALYSES						
063-709-914		Weekly Lehigh St. permit		TDS, Chloride Tot Set Mat						
SAMPLER(S): David Walker (printed)		David C. Valt (signature)								
CONTRACT LABORATORY:		Alpha								
TURN-AROUND TIME:		Standard								
Sample I.D.	Lab I.D.	Collection		Matrix	Depth	Type/Vol.	Filter	Preserv.	Cont. Qty.	Remarks
		Date	Time							
Pond 9 Eff M-002		2-20-14	1230	W		X	N	-	1	Include J-f-lags
Pond 9 UP R-001B			1240			X	N	-	1	
Pond 9 DN R-002B			1250			X	N	-	1	
Pond 17 Eff M-004			1325			X	N	-	1	
Pond 17 DN R-002D			1335			X	N	-	1	

Relinquished by: (signature)
David C. Valt

Relinquished by: (signature)
David C. Valt

Relinquished by: (signature)
David C. Valt

Received by: (signature)
John Zehn

Received by: (signature)
John Zehn

Received by: (signature)
John Zehn

Date/Time: 2/20/14 14:50

Date/Time: 2-20-14 1900

Date/Time: 2-20-14 2140

SEND RESULTS TO:

Attn: George Wegmann, Greg Knapp, Chow kip

Golder Associates Inc.

425 Lakeside Drive

Sunnyvale, CA 94085

Phone (408) 220-9223

Fax (408) 220-9224



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ELAP Certificate Numbers 1551 and 2728

06 March 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14B1531

Enclosed are the results of analyses for samples received by the laboratory on 02/24/14 21:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/06/14 15:15

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 Composite	14B1531-01	Water	02/21/14 12:20	02/24/14 21:35
Pond 17 Composite	14B1531-02	Water	02/21/14 13:00	02/24/14 21:35



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/06/14 15:15

Conventional Chemistry Parameters by APHA/EPA Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 9 Composite (14B1531-01) Water Sampled: 02/21/14 12:20 Received: 02/24/14 21:35											
Total Suspended Solids	4.5	0.30	0.50	mg/l	1	AB42624	02/26/14 08:00	03/01/14 10:00	SM2540D		
Pond 17 Composite (14B1531-02) Water Sampled: 02/21/14 13:00 Received: 02/24/14 21:35											
Total Suspended Solids	20	0.30	0.50	mg/l	1	AB42624	02/26/14 08:00	03/01/14 10:00	SM2540D		



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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
03/06/14 15:15

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AB42624 - General Preparation

Blank (AB42624-BLK1)

Prepared: 02/26/14 Analyzed: 03/01/14

Total Suspended Solids	0.400	0.30	0.50	mg/l						J
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Duplicate (AB42624-DUP1)

Source: 14B1419-01

Prepared: 02/26/14 Analyzed: 03/01/14

Total Suspended Solids	173	0.30	0.50	mg/l		187		7.39	30	
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Duplicate (AB42624-DUP2)

Source: 14B1433-01

Prepared: 02/26/14 Analyzed: 03/01/14

Total Suspended Solids	267	0.30	0.50	mg/l		307		14.0	30	
------------------------	-----	------	------	------	--	-----	--	------	----	--



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/06/14 15:15

Notes and Definitions

J Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates
CHAIN OF CUSTODY

151531

Page ___ of ___

Quotation No. PO #450554289

[illegible]

white: lab copy	yellow: project file
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ELAP Certificate Numbers 1551 and 2728

17 March 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh Permanente

Work Order: 14B1886

Enclosed are the results of analyses for samples received by the laboratory on 02/27/14 21:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh Permanente

Project Number: 637109914

Reported:

03/17/14 08:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 30	14B1886-01	Water	02/27/14 09:25	02/27/14 21:00
Field Blank	14B1886-02	Water	02/27/14 09:30	02/27/14 21:00



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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh Permanente
Project Number: 637109914

Reported:
03/17/14 08:07

Metals by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 30 (14B1886-01) Water Sampled: 02/27/14 09:25 Received: 02/27/14 21:00										
Chromium, hexavalent	ND	0.0050	0.010	mg/l	1	AC41066	03/10/14 14:00	03/10/14 16:28	SM3500-Cr B	U
Mercury	22.4	0.200	0.500	ng/l	"	AC40553	03/05/14 17:00	03/06/14 16:59	EPA 1631E	
Field Blank (14B1886-02) Water Sampled: 02/27/14 09:30 Received: 02/27/14 21:00										
Mercury	ND	0.200	0.500	ng/l	1	AC40553	03/05/14 17:00	03/06/14 17:08	EPA 1631E	U



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh Permanente

Project Number: 637109914

Reported:

03/17/14 08:07

Conventional Chemistry Parameters by APHA/EPA Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
Pond 30 (14B1886-01) Water Sampled: 02/27/14 09:25 Received: 02/27/14 21:00											
Chemical Oxygen Demand	49	9.0	50	mg/l	1	AC40829	03/08/14 08:18	03/12/14 09:30	SM5220D		
Oil & Grease (HEM)	ND	0.80	5.0	"	"	AC41221	03/12/14 07:17	03/14/14 17:34	EPA 1664A	U	
Total Suspended Solids	26	0.30	1.0	"	"	AC40448	03/04/14 17:32	03/06/14 11:40	SM2540D		



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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh Permanente
Project Number: 637109914

Reported:
03/17/14 08:07

Metals by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC40553 - EPA 1631

Blank (AC40553-BLK1)

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	ND	0.200	0.500	ng/l							U
Mercury	ND	0.200	0.500	"							U

LCS (AC40553-BS1)

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	5.19	0.200	0.500	ng/l	5.00		104	77-123			
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Matrix Spike (AC40553-MS1)

Source: 14B1636-01

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	24.1	0.200	0.500	ng/l	25.0	3.17	83.7	71-125			
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Matrix Spike (AC40553-MS2)

Source: 14B1890-01

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	41.6	0.200	0.500	ng/l	25.0	19.7	87.3	71-125			
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Matrix Spike Dup (AC40553-MSD1)

Source: 14B1636-01

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	26.0	0.200	0.500	ng/l	25.0	3.17	91.3	71-125	7.62	24	
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Matrix Spike Dup (AC40553-MSD2)

Source: 14B1890-01

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	42.0	0.200	0.500	ng/l	25.0	19.7	88.9	71-125	0.934	24	
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Batch AC41066 - SM3500 Cr6 Water

Blank (AC41066-BLK1)

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	ND	0.0050	0.010	mg/l							U
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LCS (AC41066-BS1)

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	0.106	0.0050	0.010	mg/l	0.100		106	80-120			
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Duplicate (AC41066-DUP1)

Source: 14C0328-01

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	ND	0.0050	0.010	mg/l		ND				20	U
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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh Permanente

Project Number: 637109914

Reported:

03/17/14 08:07

Metals by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC41066 - SM3500 Cr6 Water

Matrix Spike (AC41066-MS1)

Source: 14C0328-01

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	0.0961	0.0050	0.010	mg/l	0.100	ND	96.1	0-200		
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Matrix Spike (AC41066-MS2)

Source: 14B1731-01

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	0.0886	0.0050	0.010	mg/l	0.100	ND	88.6	0-200		
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Matrix Spike Dup (AC41066-MSD1)

Source: 14C0328-01

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	0.0950	0.0050	0.010	mg/l	0.100	ND	95.0	0-200	1.12	20
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Lehigh Southwest Cement Company
 Dallas TX, 75266-0140
 PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
 Project: Lehigh Permanente
 Project Number: 637109914

Reported:
 03/17/14 08:07

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC40448 - General Preparation

Blank (AC40448-BLK1)		Prepared: 03/04/14 Analyzed: 03/06/14									
Total Suspended Solids	ND	0.30	1.0	mg/l							U
Duplicate (AC40448-DUP1)		Source: 14B1872-05 Prepared: 03/04/14 Analyzed: 03/06/14									
Total Suspended Solids	134	0.30	1.0	mg/l		134			0.00	30	
Duplicate (AC40448-DUP2)		Source: 14B1880-01 Prepared: 03/04/14 Analyzed: 03/06/14									
Total Suspended Solids	100	0.30	1.0	mg/l		110			9.52	30	

Batch AC40829 - General Preparation

Blank (AC40829-BLK1)		Prepared: 03/08/14 Analyzed: 03/12/14									
Chemical Oxygen Demand	ND	9.0	50	mg/l							U
LCS (AC40829-BS1)		Prepared: 03/08/14 Analyzed: 03/12/14									
Chemical Oxygen Demand	400	9.0	50	mg/l	400		100	85-115			
LCS Dup (AC40829-BSD1)		Prepared: 03/08/14 Analyzed: 03/12/14									
Chemical Oxygen Demand	407	9.0	50	mg/l	400		102	85-115	1.73	20	
Duplicate (AC40829-DUP1)		Source: 14B1952-01 Prepared: 03/08/14 Analyzed: 03/12/14									
Chemical Oxygen Demand	64.0	9.0	50	mg/l		66.0			3.08	20	
Matrix Spike (AC40829-MS1)		Source: 14B1952-01 Prepared: 03/08/14 Analyzed: 03/12/14									
Chemical Oxygen Demand	506	9.0	50	mg/l	400	66.0	110	85-115			
Matrix Spike Dup (AC40829-MSD1)		Source: 14B1952-01 Prepared: 03/08/14 Analyzed: 03/12/14									
Chemical Oxygen Demand	502	9.0	50	mg/l	400	66.0	109	85-115	0.794	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh Permanente

Project Number: 637109914

Reported:

03/17/14 08:07

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC41221 - General Preparation

Blank (AC41221-BLK1)

Prepared: 03/12/14 Analyzed: 03/14/14

Oil & Grease (HEM)	ND	0.80	1.4	mg/l							U
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LCS (AC41221-BS1)

Prepared: 03/12/14 Analyzed: 03/14/14

Oil & Grease (HEM)	35.6	0.80	1.4	mg/l	40.0		89.0	78-114			
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LCS Dup (AC41221-BSD1)

Prepared: 03/12/14 Analyzed: 03/14/14

Oil & Grease (HEM)	38.9	0.80	1.4	mg/l	40.0		97.2	78-114	8.86	18	
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alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh Permanente
Project Number: 637109914

Reported:
03/17/14 08:07

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
U	Analyte included in analysis, but not detected at or above MDL.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

March 26, 2014

Alpha Analytical Laboratories Inc.
ATTN: Robbie Phillips
208 Mason St.
Ukiah, CA 95482
robbie@alpha-labs.com

RE: Project AAL-DB1301

Client Project: 14B1886

Dear Mr. Phillips,

On March 5, 2014, Brooks Rand Labs (BRL) received two (2) water samples. The samples were logged-in for the contracted analyses of total silver (Ag), arsenic (As), beryllium (Be), cadmium (Cd), chromium (Cr), copper (Cu), nickel (Ni), lead (Pb), antimony (Sb), selenium (Se), thallium (Tl), and zinc (Zn) according to the chain-of-custody (COC) forms. Samples for dissolved analyses were field filtered. The samples were received, prepared, analyzed, and stored according to BRL SOPs and EPA methodology.

The results were blank-corrected as described in the calculations section of the relevant SOP(s) and may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

In instances where the native sample result and/or the associated duplicate (DUP) result were below the MDL the RPD was not calculated (**N/C**).

The sample *14B1886-02 Field Blank* (1410012-02) was labeled as a field blank and had Cu, Pb, and Zn concentrations above the MRL. All associated samples had Cu and Zn concentrations greater than 10x the concentration of the field blank. The Pb results for the samples may demonstrate possible contamination through field sample collection techniques employed.

The Ni matrix spike/matrix spike duplicate (MS/MSD) set performed on sample 1410027-01 had low recoveries. The sample was qualified for the low recoveries; however no samples from this work order were qualified.

Aside from concentration qualifiers, all data was reported without qualification and all other associated quality control sample results met the acceptance criteria.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,



Lydia Greaves
Project Manager
lydia@brooksrands.com

Report Information

Laboratory Accreditation

BRL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BRL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <<http://www.brooksrand.com/default.asp?contentID=586>>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

BLK	method blank	MS	matrix spike
BRL	Brooks Rand Labs	MSD	matrix spike duplicate
BS	laboratory fortified blank	ND	non-detect
CAL	calibration standard	NR	non-reportable
CCV	continuing calibration verification	PS	post preparation spike
COC	chain of custody record	REC	percent recovery
CRM	certified reference material	RPD	relative percent difference
D	dissolved fraction	RSD	relative standard deviation
DUP	duplicate	SCV	secondary calibration verification
ICV	initial calibration verification	SOP	standard operating procedure
MDL	method detection limit	SRM	standard reference material
MRL	method reporting limit	T	total recoverable fraction
IBL	instrument blank		

Definition of Data Qualifiers

(Effective 9/23/09)

B	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Result is estimated.
J	Estimated value. A full explanation is presented in the narrative.
J-M	Duplicate precision (RPD) for associated QC sample was not within acceptance criteria. Result is estimated.
J-N	Spike recovery for associated QC sample was not within acceptance criteria. Result is estimated.
M	Duplicate precision (RPD) was not within acceptance criteria. Result is estimated.
N	Spike recovery was not within acceptance criteria. Result is estimated.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Rand Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BRL.

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
14B1886-01 Pond 30	1410012-01	Water	Sample	02/27/2014	03/05/2014
14B1886-02 Field Blank	1410012-02	DIW	Field Blank	02/27/2014	03/05/2014

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
Ag	Water	EPA 1638	03/07/2014	03/20/2014	B140358	1400234
As	Water	EPA 1638 DRC	03/07/2014	03/10/2014	B140359	1400191
Be	Water	EPA 1638	03/07/2014	03/20/2014	B140358	1400234
Cd	Water	EPA 1638	03/07/2014	03/20/2014	B140358	1400234
Cr	Water	EPA 1638 DRC	03/07/2014	03/12/2014	B140360	1400204
Cu	Water	EPA 1638	03/07/2014	03/20/2014	B140358	1400234
Ni	Water	EPA 1638 DRC	03/07/2014	03/12/2014	B140360	1400204
Pb	Water	EPA 1638	03/07/2014	03/20/2014	B140358	1400234
Sb	Water	EPA 1638	03/07/2014	03/20/2014	B140358	1400234
Se	Water	EPA 1638 DRC	03/07/2014	03/10/2014	B140359	1400191
Tl	Water	EPA 1638	03/07/2014	03/20/2014	B140358	1400234
Zn	Water	EPA 1638	03/07/2014	03/20/2014	B140358	1400234



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
14B1886-01 Pond 30										
1410012-01	Ag	Water	T	0.011	B	0.005	0.021	µg/L	B140358	1400234
1410012-01	As	Water	T	1.93		0.009	0.032	µg/L	B140359	1400191
1410012-01	Be	Water	T	0.053	U	0.053	0.158	µg/L	B140358	1400234
1410012-01	Cd	Water	T	0.134		0.007	0.021	µg/L	B140358	1400234
1410012-01	Cr	Water	T	11.1		0.009	0.032	µg/L	B140360	1400204
1410012-01	Cu	Water	T	7.47		0.042	0.126	µg/L	B140358	1400234
1410012-01	Ni	Water	T	15.0		0.053	0.211	µg/L	B140360	1400204
1410012-01	Pb	Water	T	0.300		0.006	0.026	µg/L	B140358	1400234
1410012-01	Sb	Water	T	0.505		0.011	0.042	µg/L	B140358	1400234
1410012-01	Se	Water	T	14.6		0.021	0.063	µg/L	B140359	1400191
1410012-01	Tl	Water	T	0.068		0.003	0.011	µg/L	B140358	1400234
1410012-01	Zn	Water	T	18.9		0.06	0.21	µg/L	B140358	1400234
14B1886-02 Field Blank										
1410012-02	Ag	DIW	T	0.005	U	0.005	0.021	µg/L	B140358	1400234
1410012-02	As	DIW	T	0.009	U	0.009	0.032	µg/L	B140359	1400191
1410012-02	Be	DIW	T	0.053	U	0.053	0.158	µg/L	B140358	1400234
1410012-02	Cd	DIW	T	0.007	U	0.007	0.021	µg/L	B140358	1400234
1410012-02	Cr	DIW	T	0.031	B	0.009	0.032	µg/L	B140360	1400204
1410012-02	Cu	DIW	T	0.318		0.042	0.126	µg/L	B140358	1400234
1410012-02	Ni	DIW	T	0.053	U	0.053	0.211	µg/L	B140360	1400204
1410012-02	Pb	DIW	T	0.068		0.006	0.026	µg/L	B140358	1400234
1410012-02	Sb	DIW	T	0.011	U	0.011	0.042	µg/L	B140358	1400234
1410012-02	Se	DIW	T	0.021	U	0.021	0.063	µg/L	B140359	1400191
1410012-02	Tl	DIW	T	0.003	U	0.003	0.011	µg/L	B140358	1400234
1410012-02	Zn	DIW	T	0.38		0.06	0.21	µg/L	B140358	1400234

Accuracy & Precision Summary

Batch: B140358

Lab Matrix: Water

Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140358-BS1	Laboratory Fortified Blank (1351061)						
	Ag		0.4211	0.416	µg/L	99% 75-125	
	Be		3.158	3.479	µg/L	110% 75-125	
	Cd		0.2105	0.229	µg/L	109% 75-125	
	Cu		2.105	2.227	µg/L	106% 75-125	
	Pb		0.5259	0.555	µg/L	106% 75-125	
	Sb		0.4211	0.414	µg/L	98% 75-125	
	Tl		0.2105	0.228	µg/L	108% 75-125	
	Zn		4.211	4.41	µg/L	105% 75-125	
B140358-SRM1	Certified Reference Material (1323040, NIST 1643e)						
	Ag		1.062	0.979	µg/L	92% 75-125	
	Be		13.98	15.51	µg/L	111% 75-125	
	Cd		6.568	6.596	µg/L	100% 75-125	
	Cu		22.76	23.27	µg/L	102% 75-125	
	Pb		19.63	19.67	µg/L	100% 75-125	
	Sb		58.30	56.79	µg/L	97% 75-125	
	Tl		7.445	7.463	µg/L	100% 75-125	
	Zn		78.50	84.16	µg/L	107% 75-125	
B140358-DUP1	Duplicate (1410011-01)						
	Ag	0.011		0.012	µg/L		12% 20
	Be	ND		ND	µg/L		N/C 20
	Cd	0.094		0.089	µg/L		6% 20
	Cu	5.640		5.910	µg/L		5% 20
	Pb	0.644		0.646	µg/L		0.2% 20
	Sb	0.779		0.808	µg/L		4% 20
	Tl	0.041		0.041	µg/L		0.8% 20
	Zn	9.01		9.60	µg/L		6% 20

Accuracy & Precision Summary

Batch: B140358

Lab Matrix: Water

Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140358-MS1	Matrix Spike (1410011-01)						
	Ag	0.011	0.4211	0.365	µg/L	84% 75-125	
	Be	ND	0.2105	0.239	µg/L	113% 75-125	
	Cd	0.094	0.2105	0.299	µg/L	97% 75-125	
	Cu	5.640	2.105	7.782	µg/L	102% 75-125	
	Pb	0.644	0.5259	1.092	µg/L	85% 75-125	
	Sb	0.779	0.2105	0.990	µg/L	101% 75-125	
	Tl	0.041	0.1053	0.137	µg/L	91% 75-125	
	Zn	9.01	10.53	18.85	µg/L	93% 75-125	
B140358-MSD1	Matrix Spike Duplicate (1410011-01)						
	Ag	0.011	0.4211	0.363	µg/L	84% 75-125	0.6% 20
	Be	ND	0.2105	0.234	µg/L	111% 75-125	2% 20
	Cd	0.094	0.2105	0.301	µg/L	98% 75-125	0.7% 20
	Cu	5.640	2.105	7.651	µg/L	96% 75-125	2% 20
	Pb	0.644	0.5259	1.092	µg/L	85% 75-125	0.04% 20
	Sb	0.779	0.2105	0.998	µg/L	104% 75-125	0.7% 20
	Tl	0.041	0.1053	0.139	µg/L	93% 75-125	1% 20
	Zn	9.01	10.53	19.32	µg/L	98% 75-125	2% 20

Accuracy & Precision Summary

Batch: B140359
Lab Matrix: Water
Method: EPA 1638 DRC

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140359-BS1	Laboratory Fortified Blank (1351061)						
	As		5.263	5.230	µg/L	99% 75-125	
	Se		6.316	5.280	µg/L	84% 75-125	
B140359-SRM1	Certified Reference Material (1323040, NIST 1643e)						
	As		60.45	61.04	µg/L	101% 75-125	
	Se		11.97	11.99	µg/L	100% 75-125	
B140359-DUP2	Duplicate (1410011-01)						
	As	0.705		0.692	µg/L		2% 20
	Se	22.77		22.30	µg/L		2% 20
B140359-MS2	Matrix Spike (1410011-01)						
	As	0.705	1.053	1.934	µg/L	117% 75-125	
	Se	22.77	31.58	47.76	µg/L	79% 75-125	
B140359-MSD2	Matrix Spike Duplicate (1410011-01)						
	As	0.705	1.053	1.821	µg/L	106% 75-125	6% 20
	Se	22.77	31.58	47.85	µg/L	79% 75-125	0.2% 20

Accuracy & Precision Summary

Batch: B140360
Lab Matrix: Water
Method: EPA 1638 DRC

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140360-BS1	Laboratory Fortified Blank (1351061)						
	Cr		3.162	3.126	µg/L	99% 75-125	
	Ni		4.211	4.275	µg/L	102% 75-125	
B140360-SRM1	Certified Reference Material (1323040, NIST 1643e)						
	Cr		20.40	19.76	µg/L	97% 75-125	
	Ni		62.41	61.23	µg/L	98% 75-125	
B140360-SRM2	Certified Reference Material (1352079, Fe, Ca check (SCV3 as SRM))						
	Cr		50.00	48.90	µg/L	98% 0-200	
	Ni		20.00	20.44	µg/L	102% 0-200	
B140360-DUP1	Duplicate (1410027-01)						
	Cr	1.698		1.686	µg/L		0.7% 20
	Ni	10.15		10.31	µg/L		2% 20
B140360-MS1	Matrix Spike (1410027-01)						
	Cr	1.698	10.54	10.42	µg/L	83% 75-125	
	Ni	10.15	10.53	17.70	µg/L	72% 75-125	
B140360-MSD1	Matrix Spike Duplicate (1410027-01)						
	Cr	1.698	10.54	10.24	µg/L	81% 75-125	2% 20
	Ni	10.15	10.53	17.42	µg/L	69% 75-125	2% 20

Method Blanks & Reporting Limits

Batch: B140358
Matrix: Water
Method: EPA 1638
Analyte: Ag 107

Sample	Result	Units		
B140358-BLK1	-0.002	µg/L		
B140358-BLK2	-0.002	µg/L		
B140358-BLK3	-0.002	µg/L		
B140358-BLK4	-0.002	µg/L		
Average: -0.002		Standard Deviation: 0.000	MDL: 0.005	
Limit: 0.021		Limit: 0.005	MRL: 0.021	

Analyte: Be

Sample	Result	Units		
B140358-BLK1	-0.006	µg/L		
B140358-BLK2	-0.006	µg/L		
B140358-BLK3	-0.006	µg/L		
B140358-BLK4	-0.007	µg/L		
Average: -0.006		Standard Deviation: 0.000	MDL: 0.053	
Limit: 0.158		Limit: 0.053	MRL: 0.158	

Analyte: Cd 114

Sample	Result	Units		
B140358-BLK1	-0.002	µg/L		
B140358-BLK2	-0.002	µg/L		
B140358-BLK3	-0.002	µg/L		
B140358-BLK4	-0.002	µg/L		
Average: -0.002		Standard Deviation: 0.000	MDL: 0.007	
Limit: 0.021		Limit: 0.007	MRL: 0.021	

Method Blanks & Reporting Limits

Analyte: Cu 63

Sample	Result	Units		
B140358-BLK1	-0.008	µg/L		
B140358-BLK2	-0.008	µg/L		
B140358-BLK3	-0.008	µg/L		
B140358-BLK4	-0.009	µg/L		
Average: -0.008		Standard Deviation: 0.000	MDL: 0.042	
Limit: 0.126		Limit: 0.042	MRL: 0.126	

Analyte: Pb

Sample	Result	Units		
B140358-BLK1	-0.002	µg/L		
B140358-BLK2	-0.002	µg/L		
B140358-BLK3	-0.002	µg/L		
B140358-BLK4	-0.002	µg/L		
Average: -0.002		Standard Deviation: 0.000	MDL: 0.006	
Limit: 0.026		Limit: 0.006	MRL: 0.026	

Analyte: Sb

Sample	Result	Units		
B140358-BLK1	0.0006	µg/L		
B140358-BLK2	0.0002	µg/L		
B140358-BLK3	0.0002	µg/L		
B140358-BLK4	0.001	µg/L		
Average: 0.001		Standard Deviation: 0.000	MDL: 0.011	
Limit: 0.042		Limit: 0.011	MRL: 0.042	

Analyte: Ti

Sample	Result	Units		
B140358-BLK1	-0.002	µg/L		
B140358-BLK2	-0.002	µg/L		
B140358-BLK3	-0.002	µg/L		
B140358-BLK4	-0.002	µg/L		
Average: -0.002		Standard Deviation: 0.000	MDL: 0.003	
Limit: 0.011		Limit: 0.003	MRL: 0.011	

Method Blanks & Reporting Limits

Analyte: Zn 66

Sample	Result	Units			
B140358-BLK1	0.001	µg/L			
B140358-BLK2	0.0004	µg/L			
B140358-BLK3	0.002	µg/L			
B140358-BLK4	0.004	µg/L			
Average: 0.00		Standard Deviation: 0.00		MDL: 0.06	
Limit: 0.21		Limit: 0.06		MRL: 0.21	

Method Blanks & Reporting Limits

Batch: B140359
Matrix: Water
Method: EPA 1638 DRC
Analyte: As 91

Sample	Result	Units		
B140359-BLK1	0.0009	µg/L		
B140359-BLK2	0.0007	µg/L		
B140359-BLK3	0.001	µg/L		
B140359-BLK4	0.0009	µg/L		
Average: 0.001		Standard Deviation: 0.000	MDL: 0.009	
Limit: 0.032		Limit: 0.009	MRL: 0.032	

Analyte: Se 78

Sample	Result	Units		
B140359-BLK1	0.028	µg/L		
B140359-BLK2	0.028	µg/L		
B140359-BLK3	0.028	µg/L		
B140359-BLK4	0.027	µg/L		
Average: 0.028		Standard Deviation: 0.001	MDL: 0.021	
Limit: 0.063		Limit: 0.021	MRL: 0.063	

Method Blanks & Reporting Limits

Batch: B140360
Matrix: Water
Method: EPA 1638 DRC
Analyte: Cr 52

Sample	Result	Units		
B140360-BLK1	-0.0009	µg/L		
B140360-BLK2	-0.003	µg/L		
B140360-BLK3	-0.002	µg/L		
B140360-BLK4	-0.003	µg/L		
Average: -0.002		Standard Deviation: 0.001	MDL: 0.009	
Limit: 0.032		Limit: 0.009	MRL: 0.032	

Analyte: Ni 62

Sample	Result	Units		
B140360-BLK1	-0.012	µg/L		
B140360-BLK2	-0.015	µg/L		
B140360-BLK3	-0.015	µg/L		
B140360-BLK4	-0.016	µg/L		
Average: -0.015		Standard Deviation: 0.002	MDL: 0.053	
Limit: 0.211		Limit: 0.053	MRL: 0.211	

Project ID: AAL-DB1301
PM: Lydia Greaves



BRL Report 1410012
Client PM: Robbie Phillips
Client PO: 130903RP-1

Sample Containers

Lab ID: 1410012-01		Report Matrix: Water		Collected: 02/27/2014	
Sample: 14B1886-01 Pond 30		Sample Type: Sample		Received: 03/05/2014	
Des	Container	Size	Lot	Preservation	P-Lot
A	Client-Provided	500mL	W1297FU DP	0.1% HNO3 (BRL)	1350086
					pH
					<2
					Ship. Cont.
					Cooler

Lab ID: 1410012-02		Report Matrix: DIW		Collected: 02/27/2014	
Sample: 14B1886-02 Field Blank		Sample Type: Field Blank		Received: 03/05/2014	
Des	Container	Size	Lot	Preservation	P-Lot
A	Client-Provided	500mL	W1297FU DP	0.1% HNO3 (BRL)	1350086
					pH
					<2
					Ship. Cont.
					Cooler

Shipping Containers

Cooler

Received: March 5, 2014 9:00
Tracking No: 1Z8942500147118377 via FedEx
Coolant Type: Ice
Temperature: 1.5 °C

Description: Cooler
Damaged in transit? No
Returned to client? No

Custody seals present? Yes
Custody seals intact? Yes
COC present? Yes

SUBCONTRACT ORDER
Alpha Analytical Laboratories, Inc.
14B1886

BRL Report 1410012

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: Robbie C. Phillips

RECEIVING LABORATORY:

Brooks Rand Labs, LLC
3958 6th Avenue NW
Seattle, WA 98107
Phone : (206) 632-6206
Fax: (206) 632-6017
Terms: Net 30

Analysis	Due	Expires	Comments
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14B1886-01 Pond 30 [Water] Sampled 02/27/14 09:25 Pacific

1638 Zn Total ICPMS	03/14/14 12:00	08/26/14 09:25
1638 As Total ICPMS	03/14/14 12:00	08/26/14 09:25
1638 Be Total ICPMS	03/14/14 12:00	08/26/14 09:25
1638 Cd Total ICPMS	03/14/14 12:00	08/26/14 09:25
1638 Cr Total ICPMS	03/14/14 12:00	08/26/14 09:25
1638 Cu Total ICPMS	03/14/14 12:00	08/26/14 09:25
1638 Ni Total ICPMS	03/14/14 12:00	08/26/14 09:25
1638 Pb Total ICPMS	03/14/14 12:00	08/26/14 09:25
1638 Sb Total ICPMS	03/14/14 12:00	08/26/14 09:25
1638 Se Total ICPMS	03/14/14 12:00	08/26/14 09:25
1638 Ag Total ICPMS	03/14/14 12:00	08/26/14 09:25
1638 Tl Total ICPMS	03/14/14 12:00	08/26/14 09:25

Containers Supplied:

500ml Glass - Unpreserve

14B1886-02 Field Blank [Water] Sampled 02/27/14 09:30 Pacific


1638 Zn Total ICPMS	03/14/14 12:00	08/26/14 09:30
1638 As Total ICPMS	03/14/14 12:00	08/26/14 09:30
1638 Be Total ICPMS	03/14/14 12:00	08/26/14 09:30
1638 Cd Total ICPMS	03/14/14 12:00	08/26/14 09:30
1638 Cr Total ICPMS	03/14/14 12:00	08/26/14 09:30
1638 Cu Total ICPMS	03/14/14 12:00	08/26/14 09:30
1638 Ni Total ICPMS	03/14/14 12:00	08/26/14 09:30
1638 Pb Total ICPMS	03/14/14 12:00	08/26/14 09:30
1638 Sb Total ICPMS	03/14/14 12:00	08/26/14 09:30
1638 Se Total ICPMS	03/14/14 12:00	08/26/14 09:30
1638 Tl Total ICPMS	03/14/14 12:00	08/26/14 09:30
1638 Ag Total ICPMS	03/14/14 12:00	08/26/14 09:30


Containers Supplied:

500ml Glass - Unpreserve


Released By


Date


Received By


Date

Released By

Date

Received By

Date

15 of 16

SUBCONTRACT ORDER
Alpha Analytical Laboratories, Inc.
14B1886

BRL Report 1410012

☐ Report to State

System Name: _____

Employed by: _____

User ID: _____

Sampler: _____

System Number: _____

+QC
+J-Flags



2-28-14

Released By _____ Date _____



3/5/14 9

Received By _____ Date _____

Released By _____ Date _____

16 of 16
Received By _____

Date _____



Golder Associates Inc.

Page 1 of 1

PROJECT AND PHASE NO.: 637109914

CHAIN OF CUSTODY

Quotation No. Direct Bill to
Lehigh, SW Sampling

SITE NAME: Lehigh Permanente - SW

SAMPLER SIGNATURE(S): David C. Walt

CONTRACT LABORATORY: Alpha

TURN-AROUND TIME: Standard

Sample ID	Lab ID	Collection		Matrix	Depth	Type		poly amber		voa		glass		poly		Cont.	Qty.	Remarks
		Date	Time			Volume	Filter	Preserv.	1 L	40 ml	1 L	40 ml	500 ml	250 ml	1 L			
Pond 30		2-27-14	0925	W	--			N	N	N	N	N	N	N	N		8	
Field Blank		2-27-14	0930	W				N	N	N	N	N	N	N	N		2	

Relinquished by (signature): David C. Walt

Received by (signature): Jim John

Date/Time: 2/27/14 1451

Relinquished by (signature): Jim John

Received by (signature): Jim John

Date/Time: 2/27/14 1825

Relinquished by (signature): Jim John

Received by (signature): Jim John

Date/Time: 2-27-14 21

SEND RESULTS TO:

Lehigh: Greg Knapp, Chow Yip
Attention: George Wegmann
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224



alpha

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ELAP Certificate Numbers 1551 and 2728

17 March 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14B1890

Enclosed are the results of analyses for samples received by the laboratory on 02/27/14 21:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/17/14 08:13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 13B EFF M-003	14B1890-01	Water	02/27/14 12:20	02/27/14 21:00
Pond 13B DN R-002C	14B1890-02	Water	02/27/14 12:40	02/27/14 21:00



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/17/14 08:13

Metals by EPA 200 Series Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 13B DN R-002C (14B1890-02) Water	Sampled: 02/27/14 12:40	Received: 02/27/14 21:00									
Calcium	140	0.010	1.0	mg/l	1	AC40544	03/05/14 12:00	03/06/14 17:48	EPA 200.7		
Magnesium	49	0.0080	1.0	"	"	"	"	"	"		



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/17/14 08:13

Metals by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 13B EFF M-003 (14B1890-01) Water Sampled: 02/27/14 12:20 Received: 02/27/14 21:00										
Mercury	19.7	0.200	0.500	ng/l	1	AC40553	03/05/14 17:00	03/06/14 17:16	EPA 1631E	
Pond 13B DN R-002C (14B1890-02) Water Sampled: 02/27/14 12:40 Received: 02/27/14 21:00										
Chromium, hexavalent	ND	0.0050	0.010	mg/l	1	AC41066	03/10/14 14:00	03/10/14 16:28	SM3500-Cr B	U
Mercury	23.0	0.200	0.500	ng/l	"	AC40553	03/05/14 17:00	03/06/14 17:40	EPA 1631E	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/17/14 08:13

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 13B EFF M-003 (14B1890-01) Water	Sampled: 02/27/14 12:20	Received: 02/27/14 21:00								
Oil & Grease (HEM)	ND	0.80	1.4	mg/l	1	AC41221	03/12/14 07:17	03/14/14 17:34	EPA 1664A	U
Total Dissolved Solids	1200	5.0	10	"	"	AB42815	02/28/14 10:00	03/04/14 08:45	SM2540C	
Total Suspended Solids	28	0.30	0.50	"	"	AC40450	03/05/14 08:00	03/06/14 13:18	SM2540D	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC40328	02/28/14 13:00	02/28/14 17:00	SM2540F	U
Pond 13B DN R-002C (14B1890-02) Water	Sampled: 02/27/14 12:40	Received: 02/27/14 21:00								
Salinity	ND	2.0	2.0	g/kg	1	AC40727	03/07/14 11:32	03/07/14 13:03	SM2520B	U
Total Dissolved Solids	1000	5.0	10	mg/l	"	AB42815	02/28/14 10:00	03/04/14 08:45	SM2540C	
Hardness, Total	548	1	5	"	"	AC40544	03/05/14 12:00	03/06/14 17:48	SM2340B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/17/14 08:13

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 13B EFF M-003 (14B1890-01) Water	Sampled: 02/27/14 12:20	Received: 02/27/14 21:00								
Chloride	36	0.75	12	mg/l	25	AC40339	03/03/14 11:34	03/03/14 21:21	EPA 300.0	
Pond 13B DN R-002C (14B1890-02) Water	Sampled: 02/27/14 12:40	Received: 02/27/14 21:00								
Chloride	45	0.60	10	mg/l	20	AC40339	03/03/14 08:34	03/04/14 10:48	EPA 300.0	



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Lehigh Southwest Cement Company
 Dallas TX, 75266-0140
 PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
 Project: Lehigh S & G Permit
 Project Number: 063-7109-914

Reported:
 03/17/14 08:13

Metals by EPA 200 Series Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AC40544 - Metals Digest											
Blank (AC40544-BLK1)						Prepared: 03/05/14 Analyzed: 03/06/14					
Calcium	ND	0.010	1.0	mg/l							U
Magnesium	ND	0.0080	1.0	"							U
LCS (AC40544-BS1)						Prepared: 03/05/14 Analyzed: 03/06/14					
Calcium	5.35	0.010	1.0	mg/l	5.80		92.3	85-115			
Magnesium	7.09	0.0080	1.0	"	8.00		88.7	85-115			
Duplicate (AC40544-DUP1)						Source: 14C0063-05 Prepared: 03/05/14 Analyzed: 03/06/14					
Calcium	27.5	0.010	1.0	mg/l		27.5			0.0355	20	
Magnesium	22.9	0.0080	1.0	"		22.3			2.66	20	
Matrix Spike (AC40544-MS1)						Source: 14C0063-05 Prepared: 03/05/14 Analyzed: 03/06/14					
Calcium	32.2	0.010	1.0	mg/l	5.80	27.5	80.7	70-130			
Magnesium	28.9	0.0080	1.0	"	8.00	22.3	82.8	70-130			
Matrix Spike (AC40544-MS2)						Source: 14C0011-01 Prepared: 03/05/14 Analyzed: 03/06/14					
Calcium	13.1	0.010	1.0	mg/l	5.80	7.64	94.7	70-130			
Magnesium	8.89	0.0080	1.0	"	8.00	1.64	90.7	70-130			
Matrix Spike Dup (AC40544-MSD1)						Source: 14C0063-05 Prepared: 03/05/14 Analyzed: 03/06/14					
Calcium	31.4	0.010	1.0	mg/l	5.80	27.5	67.3	70-130	2.44	20	QM-01
Magnesium	28.7	0.0080	1.0	"	8.00	22.3	80.2	70-130	0.723	20	



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Lehigh Southwest Cement Company
 Dallas TX, 75266-0140
 PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
 Project: Lehigh S & G Permit
 Project Number: 063-7109-914

Reported:
 03/17/14 08:13

Metals by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC40553 - EPA 1631

Blank (AC40553-BLK1)

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	ND	0.200	0.500	ng/l							U
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LCS (AC40553-BS1)

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	5.19	0.200	0.500	ng/l	5.00		104	77-123			
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Matrix Spike (AC40553-MS1)

Source: 14B1636-01

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	24.1	0.200	0.500	ng/l	25.0	3.17	83.7	71-125			
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Matrix Spike (AC40553-MS2)

Source: 14B1890-01

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	41.6	0.200	0.500	ng/l	25.0	19.7	87.3	71-125			
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Matrix Spike Dup (AC40553-MSD1)

Source: 14B1636-01

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	26.0	0.200	0.500	ng/l	25.0	3.17	91.3	71-125	7.62	24	
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Matrix Spike Dup (AC40553-MSD2)

Source: 14B1890-01

Prepared: 03/05/14 Analyzed: 03/06/14

Mercury	42.0	0.200	0.500	ng/l	25.0	19.7	88.9	71-125	0.934	24	
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Batch AC41066 - SM3500 Cr6 Water

Blank (AC41066-BLK1)

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	ND	0.0050	0.010	mg/l							U
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LCS (AC41066-BS1)

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	0.106	0.0050	0.010	mg/l	0.100		106	80-120			
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Duplicate (AC41066-DUP1)

Source: 14C0328-01

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	ND	0.0050	0.010	mg/l		ND				20	U
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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/17/14 08:13

Metals by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC41066 - SM3500 Cr6 Water

Matrix Spike (AC41066-MS1)

Source: 14C0328-01

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	0.0961	0.0050	0.010	mg/l	0.100	ND	96.1	0-200		
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Matrix Spike (AC41066-MS2)

Source: 14B1731-01

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	0.0886	0.0050	0.010	mg/l	0.100	ND	88.6	0-200		
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Matrix Spike Dup (AC41066-MSD1)

Source: 14C0328-01

Prepared & Analyzed: 03/10/14

Chromium, hexavalent	0.0950	0.0050	0.010	mg/l	0.100	ND	95.0	0-200	1.12	20
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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/17/14 08:13

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
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Batch AB42815 - General Preparation

Blank (AB42815-BLK1)

Prepared: 02/28/14 Analyzed: 03/04/14

Total Dissolved Solids	ND	5.0	10	mg/l					U
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Duplicate (AB42815-DUP1)

Source: 14B1687-03

Prepared: 02/28/14 Analyzed: 03/04/14

Total Dissolved Solids	984	5.0	10	mg/l		1030		4.76	30
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Duplicate (AB42815-DUP2)

Source: 14B1819-01

Prepared: 02/28/14 Analyzed: 03/04/14

Total Dissolved Solids	462	5.0	10	mg/l		474		2.56	30
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Batch AC40450 - General Preparation

Blank (AC40450-BLK1)

Prepared: 03/05/14 Analyzed: 03/06/14

Total Suspended Solids	ND	0.30	0.50	mg/l					U
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Duplicate (AC40450-DUP1)

Source: 14B1824-03

Prepared: 03/05/14 Analyzed: 03/06/14

Total Suspended Solids	40.0	0.30	0.50	mg/l		47.5		17.1	30
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Duplicate (AC40450-DUP2)

Source: 14B1925-01

Prepared: 03/05/14 Analyzed: 03/06/14

Total Suspended Solids	220	0.30	0.50	mg/l		170		25.6	30
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Batch AC40544 - Metals Digest

Blank (AC40544-BLK1)

Prepared: 03/05/14 Analyzed: 03/06/14

Hardness, Total	ND	1	5	mg/l					U
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Duplicate (AC40544-DUP1)

Source: 14C0063-05

Prepared: 03/05/14 Analyzed: 03/06/14

Hardness, Total	163	1	5	mg/l		160		1.54	20
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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/17/14 08:13

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC41221 - General Preparation

Blank (AC41221-BLK1)

Prepared: 03/12/14 Analyzed: 03/14/14

Oil & Grease (HEM)	ND	0.80	1.4	mg/l							U
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LCS (AC41221-BS1)

Prepared: 03/12/14 Analyzed: 03/14/14

Oil & Grease (HEM)	35.6	0.80	1.4	mg/l	40.0		89.0	78-114		18	
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LCS Dup (AC41221-BS1)

Prepared: 03/12/14 Analyzed: 03/14/14

Oil & Grease (HEM)	38.9	0.80	1.4	mg/l	40.0		97.2	78-114	8.86	18	
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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
03/17/14 08:13

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC40339 - General Preparation

Blank (AC40339-BLK1)

Prepared & Analyzed: 03/03/14

Chloride	ND	0.030	0.50	mg/l							U
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LCS (AC40339-BS1)

Prepared & Analyzed: 03/03/14

Chloride	9.07	0.030	0.50	mg/l	10.0		90.7	90-110			
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Duplicate (AC40339-DUP1)

Source: 14C0047-02

Prepared: 03/03/14 Analyzed: 03/04/14

Chloride	31.9	0.060	1.0	mg/l		31.9			0.0627	20	
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Matrix Spike (AC40339-MS1)

Source: 14C0047-02

Prepared: 03/03/14 Analyzed: 03/04/14

Chloride	43.1	0.060	1.0	mg/l	11.1	31.9	101	80-120			
----------	------	-------	-----	------	------	------	-----	--------	--	--	--

Matrix Spike (AC40339-MS2)

Source: 14B1799-01

Prepared & Analyzed: 03/03/14

Chloride	10.6	0.030	0.50	mg/l	11.1	0.376	92.4	80-120			
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Matrix Spike Dup (AC40339-MSD1)

Source: 14C0047-02

Prepared: 03/03/14 Analyzed: 03/04/14

Chloride	43.2	0.060	1.0	mg/l	11.1	31.9	102	80-120	0.216	20	
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alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/17/14 08:13

Notes and Definitions

QM-01 The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

March 26, 2014

Alpha Analytical Laboratories Inc.
ATTN: Robbie Phillips
208 Mason St.
Ukiah, CA 95482
robbie@alpha-labs.com

RE: Project AAL-DB1301

Client Project: 14B1890

Dear Mr. Phillips,

On March 5, 2014, Brooks Rand Labs (BRL) received two (2) water samples. The samples were logged-in for the contracted analyses of total silver (Ag), arsenic (As), beryllium (Be), cadmium (Cd), chromium (Cr), copper (Cu), nickel (Ni), lead (Pb), antimony (Sb), selenium (Se), thallium (Tl), and zinc (Zn) according to the chain-of-custody (COC) forms. Samples for dissolved analyses were field filtered. The samples were received, prepared, analyzed, and stored according to BRL SOPs and EPA methodology.

The results were blank-corrected as described in the calculations section of the relevant SOP(s) and may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

In instances where the native sample result and/or the associated duplicate (DUP) result were below the MDL the RPD was not calculated (**N/C**).

The Ni matrix spike/matrix spike duplicate (MS/MSD) set performed on sample 1410027-01 had low recoveries. The sample was qualified for the low recoveries; however no samples from this work order were qualified.

Aside from concentration qualifiers, all data was reported without qualification and all other associated quality control sample results met the acceptance criteria.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,



Lydia Greaves
Project Manager
lydia@brooksrands.com

Report Information

Laboratory Accreditation

BRL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BRL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <<http://www.brooksrand.com/default.asp?contentID=586>>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

BLK	method blank	MS	matrix spike
BRL	Brooks Rand Labs	MSD	matrix spike duplicate
BS	laboratory fortified blank	ND	non-detect
CAL	calibration standard	NR	non-reportable
CCV	continuing calibration verification	PS	post preparation spike
COC	chain of custody record	REC	percent recovery
CRM	certified reference material	RPD	relative percent difference
D	dissolved fraction	RSD	relative standard deviation
DUP	duplicate	SCV	secondary calibration verification
ICV	initial calibration verification	SOP	standard operating procedure
MDL	method detection limit	SRM	standard reference material
MRL	method reporting limit	T	total recoverable fraction
IBL	instrument blank		

Definition of Data Qualifiers

(Effective 9/23/09)

B	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Result is estimated.
J	Estimated value. A full explanation is presented in the narrative.
J-M	Duplicate precision (RPD) for associated QC sample was not within acceptance criteria. Result is estimated.
J-N	Spike recovery for associated QC sample was not within acceptance criteria. Result is estimated.
M	Duplicate precision (RPD) was not within acceptance criteria. Result is estimated.
N	Spike recovery was not within acceptance criteria. Result is estimated.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Rand Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BRL.

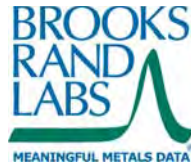


Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
14B1890-01 Pond 13B EFF M-003	1410011-01	Water	Sample	02/27/2014	03/05/2014
14B1890-02 Pond 13B DN R-002C	1410011-02	Water	Sample	02/27/2014	03/05/2014

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
Ag	Water	EPA 1638	03/07/2014	03/21/2014	B140358	1400234
As	Water	EPA 1638 DRC	03/07/2014	03/10/2014	B140359	1400191
Be	Water	EPA 1638	03/07/2014	03/21/2014	B140358	1400234
Cd	Water	EPA 1638	03/07/2014	03/21/2014	B140358	1400234
Cr	Water	EPA 1638 DRC	03/07/2014	03/12/2014	B140360	1400204
Cu	Water	EPA 1638	03/07/2014	03/21/2014	B140358	1400234
Ni	Water	EPA 1638 DRC	03/07/2014	03/12/2014	B140360	1400204
Pb	Water	EPA 1638	03/07/2014	03/21/2014	B140358	1400234
Sb	Water	EPA 1638	03/07/2014	03/21/2014	B140358	1400234
Se	Water	EPA 1638 DRC	03/07/2014	03/10/2014	B140359	1400191
Tl	Water	EPA 1638	03/07/2014	03/21/2014	B140358	1400234
Zn	Water	EPA 1638	03/07/2014	03/21/2014	B140358	1400234



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
14B1890-01 Pond 13B EFF M-003										
1410011-01	Ag	Water	T	0.011	B	0.005	0.021	µg/L	B140358	1400234
1410011-01	As	Water	T	0.705		0.009	0.032	µg/L	B140359	1400191
1410011-01	Be	Water	T	0.053	U	0.053	0.158	µg/L	B140358	1400234
1410011-01	Cd	Water	T	0.094		0.007	0.021	µg/L	B140358	1400234
1410011-01	Cr	Water	T	3.43		0.009	0.032	µg/L	B140360	1400204
1410011-01	Cu	Water	T	5.64		0.042	0.126	µg/L	B140358	1400234
1410011-01	Ni	Water	T	7.37		0.053	0.211	µg/L	B140360	1400204
1410011-01	Pb	Water	T	0.644		0.006	0.026	µg/L	B140358	1400234
1410011-01	Sb	Water	T	0.779		0.011	0.042	µg/L	B140358	1400234
1410011-01	Se	Water	T	22.8		0.021	0.063	µg/L	B140359	1400191
1410011-01	Tl	Water	T	0.041		0.003	0.011	µg/L	B140358	1400234
1410011-01	Zn	Water	T	9.01		0.06	0.21	µg/L	B140358	1400234
14B1890-02 Pond 13B DN R-002C										
1410011-02	Ag	Water	T	0.009	B	0.005	0.021	µg/L	B140358	1400234
1410011-02	As	Water	T	1.40		0.009	0.032	µg/L	B140359	1400191
1410011-02	Be	Water	T	0.053	U	0.053	0.158	µg/L	B140358	1400234
1410011-02	Cd	Water	T	0.134		0.007	0.021	µg/L	B140358	1400234
1410011-02	Cr	Water	T	2.81		0.009	0.032	µg/L	B140360	1400204
1410011-02	Cu	Water	T	4.48		0.042	0.126	µg/L	B140358	1400234
1410011-02	Ni	Water	T	13.0		0.053	0.211	µg/L	B140360	1400204
1410011-02	Pb	Water	T	0.367		0.006	0.026	µg/L	B140358	1400234
1410011-02	Sb	Water	T	0.664		0.011	0.042	µg/L	B140358	1400234
1410011-02	Se	Water	T	15.5		0.021	0.063	µg/L	B140359	1400191
1410011-02	Tl	Water	T	0.033		0.003	0.011	µg/L	B140358	1400234
1410011-02	Zn	Water	T	5.49		0.06	0.21	µg/L	B140358	1400234

Accuracy & Precision Summary

Batch: B140358

Lab Matrix: Water

Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140358-BS1	Laboratory Fortified Blank (1351061)						
	Ag		0.4211	0.416	µg/L	99% 75-125	
	Be		3.158	3.479	µg/L	110% 75-125	
	Cd		0.2105	0.229	µg/L	109% 75-125	
	Cu		2.105	2.227	µg/L	106% 75-125	
	Pb		0.5259	0.555	µg/L	106% 75-125	
	Sb		0.4211	0.414	µg/L	98% 75-125	
	Tl		0.2105	0.228	µg/L	108% 75-125	
	Zn		4.211	4.41	µg/L	105% 75-125	
B140358-SRM1	Certified Reference Material (1323040, NIST 1643e)						
	Ag		1.062	0.979	µg/L	92% 75-125	
	Be		13.98	15.51	µg/L	111% 75-125	
	Cd		6.568	6.596	µg/L	100% 75-125	
	Cu		22.76	23.27	µg/L	102% 75-125	
	Pb		19.63	19.67	µg/L	100% 75-125	
	Sb		58.30	56.79	µg/L	97% 75-125	
	Tl		7.445	7.463	µg/L	100% 75-125	
	Zn		78.50	84.16	µg/L	107% 75-125	
B140358-DUP1	Duplicate (1410011-01)						
	Ag	0.011		0.012	µg/L		12% 20
	Be	ND		ND	µg/L		N/C 20
	Cd	0.094		0.089	µg/L		6% 20
	Cu	5.640		5.910	µg/L		5% 20
	Pb	0.644		0.646	µg/L		0.2% 20
	Sb	0.779		0.808	µg/L		4% 20
	Tl	0.041		0.041	µg/L		0.8% 20
	Zn	9.01		9.60	µg/L		6% 20

Accuracy & Precision Summary

Batch: B140358

Lab Matrix: Water

Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140358-MS1	Matrix Spike (1410011-01)						
	Ag	0.011	0.4211	0.365	µg/L	84% 75-125	
	Be	ND	0.2105	0.239	µg/L	113% 75-125	
	Cd	0.094	0.2105	0.299	µg/L	97% 75-125	
	Cu	5.640	2.105	7.782	µg/L	102% 75-125	
	Pb	0.644	0.5259	1.092	µg/L	85% 75-125	
	Sb	0.779	0.2105	0.990	µg/L	101% 75-125	
	Tl	0.041	0.1053	0.137	µg/L	91% 75-125	
	Zn	9.01	10.53	18.85	µg/L	93% 75-125	
B140358-MSD1	Matrix Spike Duplicate (1410011-01)						
	Ag	0.011	0.4211	0.363	µg/L	84% 75-125	0.6% 20
	Be	ND	0.2105	0.234	µg/L	111% 75-125	2% 20
	Cd	0.094	0.2105	0.301	µg/L	98% 75-125	0.7% 20
	Cu	5.640	2.105	7.651	µg/L	96% 75-125	2% 20
	Pb	0.644	0.5259	1.092	µg/L	85% 75-125	0.04% 20
	Sb	0.779	0.2105	0.998	µg/L	104% 75-125	0.7% 20
	Tl	0.041	0.1053	0.139	µg/L	93% 75-125	1% 20
	Zn	9.01	10.53	19.32	µg/L	98% 75-125	2% 20

Accuracy & Precision Summary

Batch: B140359
Lab Matrix: Water
Method: EPA 1638 DRC

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140359-BS1	Laboratory Fortified Blank (1351061)						
	As		5.263	5.230	µg/L	99% 75-125	
	Se		6.316	5.280	µg/L	84% 75-125	
B140359-SRM1	Certified Reference Material (1323040, NIST 1643e)						
	As		60.45	61.04	µg/L	101% 75-125	
	Se		11.97	11.99	µg/L	100% 75-125	
B140359-DUP2	Duplicate (1410011-01)						
	As	0.705		0.692	µg/L		2% 20
	Se	22.77		22.30	µg/L		2% 20
B140359-MS2	Matrix Spike (1410011-01)						
	As	0.705	1.053	1.934	µg/L	117% 75-125	
	Se	22.77	31.58	47.76	µg/L	79% 75-125	
B140359-MSD2	Matrix Spike Duplicate (1410011-01)						
	As	0.705	1.053	1.821	µg/L	106% 75-125	6% 20
	Se	22.77	31.58	47.85	µg/L	79% 75-125	0.2% 20

Accuracy & Precision Summary

Batch: B140360
Lab Matrix: Water
Method: EPA 1638 DRC

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140360-BS1	Laboratory Fortified Blank (1351061)						
	Cr		3.162	3.126	µg/L	99% 75-125	
	Ni		4.211	4.275	µg/L	102% 75-125	
B140360-SRM1	Certified Reference Material (1323040, NIST 1643e)						
	Cr		20.40	19.76	µg/L	97% 75-125	
	Ni		62.41	61.23	µg/L	98% 75-125	
B140360-SRM2	Certified Reference Material (1352079, Fe, Ca check (SCV3 as SRM))						
	Cr		50.00	48.90	µg/L	98% 0-200	
	Ni		20.00	20.44	µg/L	102% 0-200	
B140360-DUP1	Duplicate (1410027-01)						
	Cr	1.698		1.686	µg/L		0.7% 20
	Ni	10.15		10.31	µg/L		2% 20
B140360-MS1	Matrix Spike (1410027-01)						
	Cr	1.698	10.54	10.42	µg/L	83% 75-125	
	Ni	10.15	10.53	17.70	µg/L	72% 75-125	
B140360-MSD1	Matrix Spike Duplicate (1410027-01)						
	Cr	1.698	10.54	10.24	µg/L	81% 75-125	2% 20
	Ni	10.15	10.53	17.42	µg/L	69% 75-125	2% 20

Method Blanks & Reporting Limits

Batch: B140358
Matrix: Water
Method: EPA 1638
Analyte: Ag 107

Sample	Result	Units		
B140358-BLK1	-0.002	µg/L		
B140358-BLK2	-0.002	µg/L		
B140358-BLK3	-0.002	µg/L		
B140358-BLK4	-0.002	µg/L		
Average: -0.002		Standard Deviation: 0.000	MDL: 0.005	
Limit: 0.021		Limit: 0.005	MRL: 0.021	

Analyte: Be

Sample	Result	Units		
B140358-BLK1	-0.006	µg/L		
B140358-BLK2	-0.006	µg/L		
B140358-BLK3	-0.006	µg/L		
B140358-BLK4	-0.007	µg/L		
Average: -0.006		Standard Deviation: 0.000	MDL: 0.053	
Limit: 0.158		Limit: 0.053	MRL: 0.158	

Analyte: Cd 114

Sample	Result	Units		
B140358-BLK1	-0.002	µg/L		
B140358-BLK2	-0.002	µg/L		
B140358-BLK3	-0.002	µg/L		
B140358-BLK4	-0.002	µg/L		
Average: -0.002		Standard Deviation: 0.000	MDL: 0.007	
Limit: 0.021		Limit: 0.007	MRL: 0.021	

Method Blanks & Reporting Limits

Analyte: Cu 63

Sample	Result	Units		
B140358-BLK1	-0.008	µg/L		
B140358-BLK2	-0.008	µg/L		
B140358-BLK3	-0.008	µg/L		
B140358-BLK4	-0.009	µg/L		
Average: -0.008		Standard Deviation: 0.000	MDL: 0.042	
Limit: 0.126		Limit: 0.042	MRL: 0.126	

Analyte: Pb

Sample	Result	Units		
B140358-BLK1	-0.002	µg/L		
B140358-BLK2	-0.002	µg/L		
B140358-BLK3	-0.002	µg/L		
B140358-BLK4	-0.002	µg/L		
Average: -0.002		Standard Deviation: 0.000	MDL: 0.006	
Limit: 0.026		Limit: 0.006	MRL: 0.026	

Analyte: Sb

Sample	Result	Units		
B140358-BLK1	0.0006	µg/L		
B140358-BLK2	0.0002	µg/L		
B140358-BLK3	0.0002	µg/L		
B140358-BLK4	0.001	µg/L		
Average: 0.001		Standard Deviation: 0.000	MDL: 0.011	
Limit: 0.042		Limit: 0.011	MRL: 0.042	

Analyte: Tl

Sample	Result	Units		
B140358-BLK1	-0.002	µg/L		
B140358-BLK2	-0.002	µg/L		
B140358-BLK3	-0.002	µg/L		
B140358-BLK4	-0.002	µg/L		
Average: -0.002		Standard Deviation: 0.000	MDL: 0.003	
Limit: 0.011		Limit: 0.003	MRL: 0.011	



Method Blanks & Reporting Limits

Analyte: Zn 66

Sample	Result	Units			
B140358-BLK1	0.001	µg/L			
B140358-BLK2	0.0004	µg/L			
B140358-BLK3	0.002	µg/L			
B140358-BLK4	0.004	µg/L			
Average: 0.00			Standard Deviation: 0.00	MDL: 0.06	
Limit: 0.21			Limit: 0.06	MRL: 0.21	

Method Blanks & Reporting Limits

Batch: B140359

Matrix: Water

Method: EPA 1638 DRC

Analyte: As 91

Sample	Result	Units		
B140359-BLK1	0.0009	µg/L		
B140359-BLK2	0.0007	µg/L		
B140359-BLK3	0.001	µg/L		
B140359-BLK4	0.0009	µg/L		
Average: 0.001		Standard Deviation: 0.000	MDL: 0.009	
Limit: 0.032		Limit: 0.009	MRL: 0.032	

Analyte: Se 78

Sample	Result	Units		
B140359-BLK1	0.028	µg/L		
B140359-BLK2	0.028	µg/L		
B140359-BLK3	0.028	µg/L		
B140359-BLK4	0.027	µg/L		
Average: 0.028		Standard Deviation: 0.001	MDL: 0.021	
Limit: 0.063		Limit: 0.021	MRL: 0.063	

Method Blanks & Reporting Limits

Batch: B140360
Matrix: Water
Method: EPA 1638 DRC
Analyte: Cr 52

Sample	Result	Units		
B140360-BLK1	-0.0009	µg/L		
B140360-BLK2	-0.003	µg/L		
B140360-BLK3	-0.002	µg/L		
B140360-BLK4	-0.003	µg/L		
Average: -0.002		Standard Deviation: 0.001	MDL: 0.009	
Limit: 0.032		Limit: 0.009	MRL: 0.032	

Analyte: Ni 62

Sample	Result	Units		
B140360-BLK1	-0.012	µg/L		
B140360-BLK2	-0.015	µg/L		
B140360-BLK3	-0.015	µg/L		
B140360-BLK4	-0.016	µg/L		
Average: -0.015		Standard Deviation: 0.002	MDL: 0.053	
Limit: 0.211		Limit: 0.053	MRL: 0.211	

Project ID: AAL-DB1301
PM: Lydia Greaves



BRL Report 1410011
Client PM: Robbie Phillips
Client PO: 130903RP-1

Sample Containers

Lab ID: 1410011-01	Report Matrix: Water	Collected: 02/27/2014
Sample: 14B1890-01 Pond 13B EFF M-003	Sample Type: Sample	Received: 03/05/2014
Des Container	Size	Lot
A Client-Provided	500mL	W1297FU
		DP
	Preservation	P-Lot
	0.1% HNO3 (BRL)	1350086
		pH
		<2
		Ship. Cont.
		Cooler

Lab ID: 1410011-02	Report Matrix: Water	Collected: 02/27/2014
Sample: 14B1890-02 Pond 13B DN R-002C	Sample Type: Sample	Received: 03/05/2014
Des Container	Size	Lot
A Client-Provided	500mL	W1297FU
		DP
	Preservation	P-Lot
	0.1% HNO3 (BRL)	1350086
		pH
		<2
		Ship. Cont.
		Cooler

Shipping Containers

Cooler

Received: March 5, 2014 9:00
Tracking No: 1Z8942500147118377 via FedEx
Coolant Type: Ice
Temperature: 1.5 °C

Description: Cooler
Damaged in transit? No
Returned to client? No

Custody seals present? Yes
Custody seals intact? Yes
COC present? Yes

SUBCONTRACT ORDER
Alpha Analytical Laboratories, Inc.
14B1890

BRL Report 1410011

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: Robbie C. Phillips

RECEIVING LABORATORY:

Brooks Rand Labs, LLC
3958 6th Avenue NW
Seattle, WA 98107
Phone : (206) 632-6206
Fax: (206) 632-6017
Terms: Net 30

Analysis	Due	Expires	Comments
14B1890-01 Pond 13B EFF M-003 [Water] Sampled 02/27/14 12:20 Pacific			
1638 Zn Total ICPMS	03/14/14 12:00	08/26/14 12:20	
1638 As Total ICPMS	03/14/14 12:00	08/26/14 12:20	
1638 Be Total ICPMS	03/14/14 12:00	08/26/14 12:20	
1638 Cd Total ICPMS	03/14/14 12:00	08/26/14 12:20	
1638 Cr Total ICPMS	03/14/14 12:00	08/26/14 12:20	
1638 Cu Total ICPMS	03/14/14 12:00	08/26/14 12:20	
1638 Ni Total ICPMS	03/14/14 12:00	08/26/14 12:20	
1638 Pb Total ICPMS	03/14/14 12:00	08/26/14 12:20	
1638 Sb Total ICPMS	03/14/14 12:00	08/26/14 12:20	
1638 Se Total ICPMS	03/14/14 12:00	08/26/14 12:20	
1638 Ag Total ICPMS	03/14/14 12:00	08/26/14 12:20	
1638 Tl Total ICPMS	03/14/14 12:00	08/26/14 12:20	

Containers Supplied:

500ml Glass - Unpreserve.

14B1890-02 Pond 13B DN R-002C [Water] Sampled 02/27/14 12:40 Pacific


1638 Zn Total ICPMS	03/14/14 12:00	08/26/14 12:40
1638 As Total ICPMS	03/14/14 12:00	08/26/14 12:40
1638 Be Total ICPMS	03/14/14 12:00	08/26/14 12:40
1638 Cd Total ICPMS	03/14/14 12:00	08/26/14 12:40
1638 Cr Total ICPMS	03/14/14 12:00	08/26/14 12:40
1638 Cu Total ICPMS	03/14/14 12:00	08/26/14 12:40
1638 Ni Total ICPMS	03/14/14 12:00	08/26/14 12:40
1638 Pb Total ICPMS	03/14/14 12:00	08/26/14 12:40
1638 Sb Total ICPMS	03/14/14 12:00	08/26/14 12:40
1638 Se Total ICPMS	03/14/14 12:00	08/26/14 12:40
1638 Tl Total ICPMS	03/14/14 12:00	08/26/14 12:40
1638 Ag Total ICPMS	03/14/14 12:00	08/26/14 12:40

Containers Supplied:

500ml Glass - Unpreserve.


Released By

2/28/14
Date


Received By

2/5/14 9
Date

Released By

Date

Received By

Date

SUBCONTRACT ORDER
Alpha Analytical Laboratories, Inc.
14B1890

BRL Report 1410011

☐ Report to State

System Name: _____

Employed by: _____

User ID: _____

Sampler: _____

System Number: _____

+QC

+J-Flags

AFB 22814
Released By Date

SDZ 3/5/14 a
Received By Date

Released By Date

Received By

Date



Golder Associates
CHAIN OF CUSTODY

06818171

Page 1 of 1
Quotation No. Qc*450554289

white	lab copy	yellow	project file



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

ELAP Certificate Numbers 1551 and 2728

18 March 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh Permanente

Work Order: 14C0019

Enclosed are the results of analyses for samples received by the laboratory on 02/28/14 20:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh Permanente

Project Number: 637109914 / SW

Reported:

03/18/14 08:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
QC Lab PL	14C0019-01	Water	02/28/14 09:30	02/28/14 20:45



Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh Permanente

Project Number: 637109914 / SW

Reported:

03/18/14 08:57

Conventional Chemistry Parameters by APHA/EPA Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
QC Lab PL (14C0019-01) Water Sampled: 02/28/14 09:30 Received: 02/28/14 20:45										
Oil & Grease (HEM)	2.9	0.80	5.0	mg/l	1	AC41223	03/12/14 07:19	03/17/14 16:54	EPA 1664A	QC-MS, J
Total Suspended Solids	2.5	0.30	1.0	"	"	AC40551	03/05/14 13:17	03/06/14 17:00	SM2540D	
Total Organic Carbon	13.2	0.100	0.300	"	"	AC41068	03/10/14 19:13	03/14/14 15:39	SM5310C	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh Permanente

Project Number: 637109914 / SW

Reported:

03/18/14 08:57

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch AC40551 - General Preparation

Blank (AC40551-BLK1)

Prepared: 03/05/14 Analyzed: 03/06/14

Total Suspended Solids	ND	0.30	0.50	mg/l							U
------------------------	----	------	------	------	--	--	--	--	--	--	---

Duplicate (AC40551-DUP1)

Source: 14C0030-01

Prepared: 03/05/14 Analyzed: 03/06/14

Total Suspended Solids	880	0.30	0.50	mg/l		880			0.00	30	
------------------------	-----	------	------	------	--	-----	--	--	------	----	--

Duplicate (AC40551-DUP2)

Source: 14C0013-02

Prepared: 03/05/14 Analyzed: 03/06/14

Total Suspended Solids	250	0.30	0.50	mg/l		50.0			133	30	QD-02
------------------------	-----	------	------	------	--	------	--	--	-----	----	-------

Batch AC41068 - General Prep

Blank (AC41068-BLK1)

Prepared: 03/10/14 Analyzed: 03/14/14

Total Organic Carbon	ND	0.100	0.300	mg/l							U
----------------------	----	-------	-------	------	--	--	--	--	--	--	---

LCS (AC41068-BS1)

Prepared: 03/10/14 Analyzed: 03/14/14

Total Organic Carbon	10.2	0.100	0.300	mg/l	10.0		102	85-115			
----------------------	------	-------	-------	------	------	--	-----	--------	--	--	--

LCS Dup (AC41068-BS1)

Prepared: 03/10/14 Analyzed: 03/14/14

Total Organic Carbon	10.3	0.100	0.300	mg/l	10.0		103	85-115	0.403	20	
----------------------	------	-------	-------	------	------	--	-----	--------	-------	----	--

Duplicate (AC41068-DUP1)

Source: 14C0321-01

Prepared: 03/10/14 Analyzed: 03/14/14

Total Organic Carbon	ND	0.100	0.300	mg/l		ND				20	U
----------------------	----	-------	-------	------	--	----	--	--	--	----	---

Matrix Spike (AC41068-MS1)

Source: 14C0321-01

Prepared: 03/10/14 Analyzed: 03/14/14

Total Organic Carbon	10.3	0.100	0.300	mg/l	10.0	ND	103	70-130			
----------------------	------	-------	-------	------	------	----	-----	--------	--	--	--

Matrix Spike Dup (AC41068-MSD1)

Source: 14C0321-01

Prepared: 03/10/14 Analyzed: 03/14/14

Total Organic Carbon	10.3	0.100	0.300	mg/l	10.0	ND	103	70-130	0.194	20	
----------------------	------	-------	-------	------	------	----	-----	--------	-------	----	--

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh Permanente

Project Number: 637109914 / SW

Reported:

03/18/14 08:57

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch AC41223 - General Preparation

Blank (AC41223-BLK1)

Prepared: 03/12/14 Analyzed: 03/17/14

Oil & Grease (HEM)	ND	0.80	5.0	mg/l							U
--------------------	----	------	-----	------	--	--	--	--	--	--	---

LCS (AC41223-BS1)

Prepared: 03/12/14 Analyzed: 03/17/14

Oil & Grease (HEM)	33.0	0.80	5.0	mg/l	40.0		82.5	78-114			
--------------------	------	------	-----	------	------	--	------	--------	--	--	--

LCS Dup (AC41223-BS1)

Prepared: 03/12/14 Analyzed: 03/17/14

Oil & Grease (HEM)	36.2	0.80	5.0	mg/l	40.0		90.5	78-114	9.25	18	
--------------------	------	------	-----	------	------	--	------	--------	------	----	--



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh Permanente

Project Number: 637109914 / SW

Reported:

03/18/14 08:57

Notes and Definitions

J Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

QC-MS MS/MSD not included with this batch due to insufficient sample volume.

QD-02 High duplicate RPD due to sample non-homogeneity.

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates Inc.

14C0019

Page of

Quotation No. Direct Bill to
Lehigh, item 7

CHAIN OF CUSTODY

PROJECT AND PHASE NO.: 637109914

SITE NAME: Lehigh Permanente - SW

SAMPLER SIGNATURE(S):

David C. Walt

CONTRACT LABORATORY: Alpha

TURN-AROUND TIME: Standard

Container Info

Sample ID	Lab ID	Collection		Matrix	Depth	Type	poly amber voa			
		Date	Time				1 L	1 L	40 ml	40 ml
QC Lab PL		2-28-14	0930	W	--		N	N	N	N

ANALYSES

TSS (160.2), TDS (2540C)										
Oil & Grease (1664)										
TOC										
per George W. email 3/6/14										

Remarks

Cont.

Qty.

5

Cancel TDS per Kim
3-17-14

Relinquished by (signature):

David C. Walt

Received by (signature):

Kim

Date/Time:

2/28/14 1355

SEND RESULTS TO:

Lehigh: Greg Knapp, Chow Yip
Attention: George Wegmann
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

Sean Foley@Alpha Labs

From: "Robbie Phillips" <Robbie@alpha-labs.com>
To: "Foley Sean" <sfoley@alpha-labs.com>; "Shoberg Jim" <jshoberg@alpha-labs.com>
Sent: Monday, March 03, 2014 4:46 PM
Subject: Fw: Emailing: 14C0019_COC_01
From: Wegmann, George
Sent: Monday, March 03, 2014 3:38 PM
To: Robbie Phillips
Subject: RE: Emailing: 14C0019_COC_01

We made a mistake with the COC, it should be for TOC, not COD. Please run the sample for TOC and not COD. This also applies to Pond 30 if the same mistake is present – run for TOC, not COD.

Thanks

From: Robbie Phillips [mailto:Robbie@alpha-labs.com]
Sent: Monday, March 03, 2014 3:29 PM
To: Wegmann, George
Subject: Emailing: 14C0019_COC_01

Hello George,

We received this COC but we received 2 x Vials (H3PO4) which are for TOC analyses which isn't listed. The COC requests COD which we didn't receive a bottle for, however, we can pull it from one of the 1 liter amber glass (H2SO4) extras. COD requires a poly container with H2SO4.

Can you confirm that you don't need TOC??

Thanks.

Robbie

Your message is ready to be sent with the following file or link attachments:
14C0019_COC_01

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

3/3/2014



alpha

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ELAP Certificate Numbers 1551 and 2728

17 March 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14C0025

Enclosed are the results of analyses for samples received by the laboratory on 02/28/14 20:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: Composite / 063-7109-914

Reported:

03/17/14 10:18

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 9 Composite	14C0025-01	Water	02/28/14 12:55	02/28/14 20:45
Pond 17 Composite	14C0025-02	Water	02/28/14 13:45	02/28/14 20:45



Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: Composite / 063-7109-914

Reported:

03/17/14 10:18

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 9 Composite (14C0025-01) Water Sampled: 02/28/14 12:55 Received: 02/28/14 20:45											
Total Suspended Solids	20	0.30	0.50	mg/l	1	AC40551	03/05/14 13:17	03/06/14 17:00	SM2540D		
Pond 17 Composite (14C0025-02) Water Sampled: 02/28/14 13:45 Received: 02/28/14 20:45											
Total Suspended Solids	19	0.30	0.50	mg/l	1	AC40551	03/05/14 13:17	03/06/14 17:00	SM2540D		



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: Composite / 063-7109-914

Reported:

03/17/14 10:18

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

Batch AC40551 - General Preparation

Blank (AC40551-BLK1)

Prepared: 03/05/14 Analyzed: 03/06/14

Total Suspended Solids	ND	0.30	0.50	mg/l						U
------------------------	----	------	------	------	--	--	--	--	--	---

Duplicate (AC40551-DUP1)

Source: 14C0030-01

Prepared: 03/05/14 Analyzed: 03/06/14

Total Suspended Solids	880	0.30	0.50	mg/l		880		0.00	30	
------------------------	-----	------	------	------	--	-----	--	------	----	--

Duplicate (AC40551-DUP2)

Source: 14C0013-02

Prepared: 03/05/14 Analyzed: 03/06/14

Total Suspended Solids	250	0.30	0.50	mg/l		50.0		133	30	QD-02
------------------------	-----	------	------	------	--	------	--	-----	----	-------



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: Composite / 063-7109-914

Reported:

03/17/14 10:18

Notes and Definitions

QD-02	High duplicate RPD due to sample non-homogeneity.
U	Analyte included in analysis, but not detected at or above MDL.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



Golder Associates CHAIN OF CUSTODY

14C0025

Page 1 of 1

Quotation No. 14C0025

PROJECT NO.:

063-7109-914

SITE NAME:

Lehigh St-G Permit

SAMPLER(S):

David Walter

David C. Kelt

CONTRACT LABORATORY:

Alpha

TURN-AROUND TIME:

Standard

Container Info

Sample I.D.

Lab I.D.

Collection

Date

Time

Matrix

Depth

Type/Vol.

Filter

Preserv.

Pond 9 Composite 2-28-14 1255 W

Pond 17 Composite ↓ 1345 ↓

12

N

N

1

1

Cont. Qty.

Remarks

ANALYSES

TSS

EDD required?

☒ Yes

☐ No

EDF required?

☐ Yes

☒ No

Relinquished by: (signature)

David C. Kelt

Relinquished by: (signature)

David Walter

Relinquished by: (signature)

WKM

Received by: (signature)

David C. Kelt

Received by: (signature)

WKM

Received by: (signature)

WKM

Date/Time:

2-28-14 1555

Date/Time:

2-28-14 1810

Date/Time:

2-28-14 2045

SEND RESULTS TO:

Attn: George Wegmann, Greg Knapp,

Golder Associates Inc.

425 Lakeside Drive

Sunnyvale, CA 94085

Phone (408) 220-9223

Fax (408) 220-9224

white: lab copy yellow: project file



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ELAP Certificate Numbers 1551 and 2728

18 March 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14C0028

Enclosed are the results of analyses for samples received by the laboratory on 02/28/14 20:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
03/18/14 08:53

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 4 EFF M-001	14C0028-01	Water	02/28/14 10:35	02/28/14 20:45
Pond 9 EFF M-002	14C0028-02	Water	02/28/14 12:30	02/28/14 20:45
Pond 9 UP R-001B	14C0028-03	Water	02/28/14 12:40	02/28/14 20:45
Pond 9 DN R-002B	14C0028-04	Water	02/28/14 12:45	02/28/14 20:45
Pond 13 EFF M-003	14C0028-05	Water	02/28/14 12:10	02/28/14 20:45
Pond 17 EFF M-004	14C0028-06	Water	02/28/14 13:30	02/28/14 20:45
Pond 17 DN R-002D	14C0028-07	Water	02/28/14 13:40	02/28/14 20:45
Pond 20 M-005	14C0028-08	Water	02/28/14 08:30	02/28/14 20:45
Pond 20 DN/21	14C0028-09	Water	02/28/14 08:50	02/28/14 20:45



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/18/14 08:53

Metals by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 13 EFF M-003 (14C0028-05) Water Sampled: 02/28/14 12:10 Received: 02/28/14 20:45											
Chromium, hexavalent	ND	0.0050	0.010	mg/l	1	AC41066	03/10/14 14:00	03/10/14 16:28	SM3500-Cr B		



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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
03/18/14 08:53

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond 4 EFF M-001 (14C0028-01) Water Sampled: 02/28/14 10:35 Received: 02/28/14 20:45										
Oil & Grease (HEM)	ND	0.80	1.4	mg/l	1	AC41223	03/12/14 07:19	03/17/14 16:54	EPA 1664A	QC-MS, U
Total Dissolved Solids	900	5.0	10	"	"	AC40421	03/04/14 10:30	03/10/14 14:30	SM2540C	
Total Suspended Solids	1.7	0.30	0.50	"	"	AC40551	03/05/14 13:17	03/06/14 17:00	SM2540D	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC40561	03/01/14 13:00	03/01/14 17:00	SM2540F	U
Pond 9 EFF M-002 (14C0028-02) Water Sampled: 02/28/14 12:30 Received: 02/28/14 20:45										
Total Dissolved Solids	550	5.0	10	mg/l	1	AC40421	03/04/14 10:30	03/10/14 14:30	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC40561	03/01/14 13:00	03/01/14 17:00	SM2540F	U
Pond 9 UP R-001B (14C0028-03) Water Sampled: 02/28/14 12:40 Received: 02/28/14 20:45										
Total Dissolved Solids	1700	5.0	10	mg/l	1	AC40421	03/04/14 10:30	03/10/14 14:30	SM2540C	
Pond 9 DN R-002B (14C0028-04) Water Sampled: 02/28/14 12:45 Received: 02/28/14 20:45										
Total Dissolved Solids	620	5.0	10	mg/l	1	AC40421	03/04/14 10:30	03/10/14 14:30	SM2540C	
Pond 17 EFF M-004 (14C0028-06) Water Sampled: 02/28/14 13:30 Received: 02/28/14 20:45										
Total Dissolved Solids	1000	5.0	10	mg/l	1	AC40421	03/04/14 10:30	03/10/14 14:30	SM2540C	
Total Settleable Solids	0.10	0.10	0.10	ml/l	"	AC40561	03/01/14 13:00	03/01/14 17:00	SM2540F	
Pond 17 DN R-002D (14C0028-07) Water Sampled: 02/28/14 13:40 Received: 02/28/14 20:45										
Total Dissolved Solids	920	5.0	10	mg/l	1	AC40421	03/04/14 10:30	03/10/14 14:30	SM2540C	
Pond 20 M-005 (14C0028-08) Water Sampled: 02/28/14 08:30 Received: 02/28/14 20:45										
Total Dissolved Solids	940	5.0	10	mg/l	1	AC40421	03/04/14 10:30	03/10/14 14:30	SM2540C	
Total Suspended Solids	57	0.30	0.50	"	"	AC40551	03/05/14 13:17	03/06/14 17:00	SM2540D	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC40561	03/01/14 13:00	03/01/14 17:00	SM2540F	U

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/18/14 08:53

Conventional Chemistry Parameters by APHA/EPA Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
Pond 20 DN/21 (14C0028-09) Water Sampled: 02/28/14 08:50 Received: 02/28/14 20:45											
Total Dissolved Solids	1100	5.0	10	mg/l	1	AC40421	03/04/14 10:30	03/10/14 14:30	SM2540C		



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 Dallas TX, 75266-0140
 PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
 Project: Lehigh S & G Permit
 Project Number: 063-7109-914

Reported:
 03/18/14 08:53

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond 4 EFF M-001 (14C0028-01) Water Sampled: 02/28/14 10:35 Received: 02/28/14 20:45										
Chloride	74	0.15	2.5	mg/l	5	AC40831	03/08/14 10:23	03/10/14 19:40	EPA 300.0	
Pond 9 EFF M-002 (14C0028-02) Water Sampled: 02/28/14 12:30 Received: 02/28/14 20:45										
Chloride	61	0.60	10	mg/l	20	AC40831	03/08/14 10:23	03/08/14 17:28	EPA 300.0	
Pond 9 UP R-001B (14C0028-03) Water Sampled: 02/28/14 12:40 Received: 02/28/14 20:45										
Chloride	150	1.5	25	mg/l	50	AC40831	03/08/14 10:23	03/08/14 17:43	EPA 300.0	
Pond 9 DN R-002B (14C0028-04) Water Sampled: 02/28/14 12:45 Received: 02/28/14 20:45										
Chloride	67	0.60	10	mg/l	20	AC40831	03/08/14 10:23	03/08/14 17:58	EPA 300.0	
Pond 17 EFF M-004 (14C0028-06) Water Sampled: 02/28/14 13:30 Received: 02/28/14 20:45										
Chloride	73	0.75	12	mg/l	25	AC40831	03/08/14 10:23	03/08/14 18:13	EPA 300.0	
Pond 17 DN R-002D (14C0028-07) Water Sampled: 02/28/14 13:40 Received: 02/28/14 20:45										
Chloride	70	0.60	10	mg/l	20	AC40831	03/08/14 10:23	03/08/14 18:28	EPA 300.0	
Pond 20 M-005 (14C0028-08) Water Sampled: 02/28/14 08:30 Received: 02/28/14 20:45										
Chloride	72	0.60	10	mg/l	20	AC40831	03/08/14 10:23	03/08/14 18:44	EPA 300.0	
Pond 20 DN/21 (14C0028-09) Water Sampled: 02/28/14 08:50 Received: 02/28/14 20:45										
Chloride	84	0.75	12	mg/l	25	AC40831	03/08/14 10:23	03/08/14 18:59	EPA 300.0	

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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
03/18/14 08:53

Metals by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AC41066 - SM3500 Cr6 Water											
Blank (AC41066-BLK1)						Prepared & Analyzed: 03/10/14					
Chromium, hexavalent	ND	0.0050	0.010	mg/l							U
LCS (AC41066-BS1)						Prepared & Analyzed: 03/10/14					
Chromium, hexavalent	0.106	0.0050	0.010	mg/l	0.100		106	80-120			
Duplicate (AC41066-DUP1)						Source: 14C0328-01 Prepared & Analyzed: 03/10/14					
Chromium, hexavalent	ND	0.0050	0.010	mg/l		ND			20		U
Matrix Spike (AC41066-MS1)						Source: 14C0328-01 Prepared & Analyzed: 03/10/14					
Chromium, hexavalent	0.0961	0.0050	0.010	mg/l	0.100	ND	96.1	0-200			
Matrix Spike (AC41066-MS2)						Source: 14B1731-01 Prepared & Analyzed: 03/10/14					
Chromium, hexavalent	0.0886	0.0050	0.010	mg/l	0.100	ND	88.6	0-200			
Matrix Spike Dup (AC41066-MSD1)						Source: 14C0328-01 Prepared & Analyzed: 03/10/14					
Chromium, hexavalent	0.0950	0.0050	0.010	mg/l	0.100	ND	95.0	0-200	1.12	20	



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Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
03/18/14 08:53

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AC40421 - General Preparation											
Blank (AC40421-BLK1)						Prepared: 03/04/14 Analyzed: 03/10/14					
Total Dissolved Solids	ND	5.0	10	mg/l							U
Duplicate (AC40421-DUP1)						Source: 14C0028-07 Prepared: 03/04/14 Analyzed: 03/10/14					
Total Dissolved Solids	908	5.0	10	mg/l		920			1.31	30	
Duplicate (AC40421-DUP2)						Source: 14C0078-03 Prepared: 03/04/14 Analyzed: 03/10/14					
Total Dissolved Solids	320	5.0	10	mg/l		309			3.50	30	
Batch AC40551 - General Preparation											
Blank (AC40551-BLK1)						Prepared: 03/05/14 Analyzed: 03/06/14					
Total Suspended Solids	ND	0.30	0.50	mg/l							U
Duplicate (AC40551-DUP1)						Source: 14C0030-01 Prepared: 03/05/14 Analyzed: 03/06/14					
Total Suspended Solids	880	0.30	0.50	mg/l		880			0.00	30	
Duplicate (AC40551-DUP2)						Source: 14C0013-02 Prepared: 03/05/14 Analyzed: 03/06/14					
Total Suspended Solids	250	0.30	0.50	mg/l		50.0			133	30	QD-02
Batch AC41223 - General Preparation											
Blank (AC41223-BLK1)						Prepared: 03/12/14 Analyzed: 03/17/14					
Oil & Grease (HEM)	ND	0.80	1.4	mg/l							U
LCS (AC41223-BS1)						Prepared: 03/12/14 Analyzed: 03/17/14					
Oil & Grease (HEM)	33.0	0.80	1.4	mg/l	40.0		82.5	78-114		18	

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Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/18/14 08:53

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC41223 - General Preparation

LCS Dup (AC41223-BS1)

Prepared: 03/12/14 Analyzed: 03/17/14

Oil & Grease (HEM)	36.2	0.80	1.4	mg/l	40.0		90.5	78-114	9.25	18	
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Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
03/18/14 08:53

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch AC40831 - General Preparation										
Blank (AC40831-BLK1)					Prepared & Analyzed: 03/08/14					
Chloride	ND	0.030	0.50	mg/l						U
LCS (AC40831-BS1)					Prepared & Analyzed: 03/08/14					
Chloride	11.5	0.030	0.50	mg/l	11.1		103	90-110		
Duplicate (AC40831-DUP1)					Source: 14C0307-01 Prepared: 03/08/14 Analyzed: 03/09/14					
Chloride	12.6	0.030	0.50	mg/l		12.6		0.222	20	
Matrix Spike (AC40831-MS1)					Source: 14C0307-01 Prepared: 03/08/14 Analyzed: 03/09/14					
Chloride	24.2	0.060	1.0	mg/l	11.1	12.6	105	80-120		
Matrix Spike (AC40831-MS2)					Source: 14C0169-02 Prepared: 03/08/14 Analyzed: 03/09/14					
Chloride	18.5	0.060	1.0	mg/l	11.1	7.40	99.9	80-120		
Matrix Spike Dup (AC40831-MSD1)					Source: 14C0307-01 Prepared: 03/08/14 Analyzed: 03/10/14					
Chloride	24.4	0.060	1.0	mg/l	11.1	12.6	106	80-120	0.476	20



alpha

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Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
03/18/14 08:53

Notes and Definitions

QC-MS MS/MSD not included with this batch due to insufficient sample volume.

QD-02 High duplicate RPD due to sample non-homogeneity.

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates CHAIN OF CUSTODY

14C0028

Page 1 of 1
Quotation No. **14C0028**

PROJECT NO.: 063-7109-914		SITE NAME: Weekly/Quarterly Lehigh STG permit		ANALYSES		EDD required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
SAMPLER(S): David Walter (printed)		CONTRACT LABORATORY: Alpha		Container Info		EDF required? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
TURN-AROUND TIME:		Standard					
Sample I.D.	Lab I.D.	Collection Date	Time	Matrix	Depth	Type/Vol. Filter Preserv.	Remarks
Pond 4 Eff M-001		2-28-14	1035	W			
Field Blank							
Pond 9 Eff M-002			1030			X X X X X	Cancel per Client 3-3-14
Pond 9 UP R-001B			1230			X X X X X	Cancel a 11 Hudson 3-3-14
Pond 9 ON R-002B			1240			X X X X X	Salinity per Kim 3-11-14
Pond 13 Eff M-003			1245			X X X X X	3-11-14
Pond 17 Eff M-004			1210			X X X X X	3-12-14
Pond 17 ON R-002D			1330			X X X X X	Cancel 105/C bridge
Pond 20 M-005			0830			X X X X X	for Pond 20W/21 per Kim 3-14-14
Pond 20 ON/21			0850			X X X X X	3-14-14

Relinquished by: (signature)	Received by: (signature)	Date/Time
David C. Walt	Sam	2-28-14 1330
Sam	Sam	2-28-14 1800 1555
Sam	Sam	2-28-14 1800 1555

SEND RESULTS TO:
Attn: George Wegmann, Greg Knapp
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224



Sheri Speaks <speaks78@gmail.com>

Fw: Lehigh samples 2/27-28

1 message

Robbie Phillips <Robbie@alpha-labs.com>

Tue, Mar 11, 2014 at 6:39 AM

To: Speaks Sheri <speaks78@gmail.com>

Can you cancel some analyses as highlighted below along with sending revised work order summaries to Kimberly? Thanks for your help.

Robbie

-----Original Message-----

From: DeVillier, Kimberly

Sent: Sunday, March 09, 2014 9:58 PM

To: Robbie Phillips (Alpha Labs) ; Wegmann, George

Cc: Walter, David (Sunnyvale)

Subject: RE: Lehigh samples 2/27-28

Hi, Robbie. Could you send us the Work Order Summaries for Lehigh samples collected 2/27 and 2/28 as discussed in the emails below and shown on the 2 chains of custody attached, please?

Please cancel hardness and salinity analyses for sample date 2/27-28 for Pond 9UP R-001B, Pond 9DN R-002B, Pond 17DN R-002D, Pond 20Dn/21. Sorry for the confusion.

Kimberly DeVillier | Geologist | Golder Associates Inc.

425 Lakeside Drive, Sunnyvale, California, USA 94085

T: +1 (408) 220-9223 | D: +1 (408) 220 9245 | F: +1 (408) 220-9224 | E:

Kimberly_DeVillier@golder.com | www.golder.com

Work Safe, Home Safe

-----Original Message-----

From: Robbie Phillips (Alpha Labs) [mailto:robbie@alpha-labs.com]

Sent: Monday, March 03, 2014 9:20 AM

To: Walter, David (Sunnyvale)

Cc: Wegmann, George; DeVillier, Kimberly

Subject: Re: Today's samples

No problem. We'll take care of it.

Thanks for the update!

Sean Foley@Alpha Labs

From: "DeVillier, Kimberly" <Kimberly_DeVillier@golder.com>
To: "Robbie Phillips (Alpha Labs)" <robbie@alpha-labs.com>; "Sean Foley" <sfoley@alpha-labs.com>
Cc: "Wegmann, George" <George_Wegmann@golder.com>
Sent: Monday, March 17, 2014 10:07 AM
Attach: 14C0028 03 14 14 1610_02.PDF
Subject: RE: 14C0028/Revised Work Order

Hi, Robbie and Sean.

Regarding Lehigh Work Order 14C0028, last Friday, I accidentally asked you to cancel the TDS and CI analyses for "Pond 20 DN/21". If possible, please run these analyses even if they are past hold time. Everything else on the work order summary looks right. Thanks.

Kimberly DeVillier | Geologist | Golder Associates Inc.
425 Lakeside Drive, Sunnyvale, California, USA 94085
T: +1 (408) 220-9223 | D: +1 (408) 220 9245 | F: +1 (408) 220-9224 | E: Kimberly_DeVillier@golder.com |
www.golder.com

Work Safe, Home Safe

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Please consider the environment before printing this email.

From: Robbie Phillips (Alpha Labs) [mailto:robbie@alpha-labs.com]
Sent: Friday, March 14, 2014 3:54 PM
To: DeVillier, Kimberly; Sean Foley
Subject: Re: 14C0028/Revised Work Order

Hello Kimberly,

Sean Foley is going to call you now and work through the changes verbally so we get you exactly what is needed. He'll be in touch in a few minutes.

Thanks.

Robbie

3/17/2014



alpha

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ELAP Certificate Numbers 1551 and 2728

25 March 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14C0548

Enclosed are the results of analyses for samples received by the laboratory on 03/06/14 21:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 (Weekly)

Reported:

03/25/14 13:13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 4A EFF M-001	14C0548-01	Water	03/06/14 12:20	03/06/14 21:45
Pond 4 DN R-002A	14C0548-02	Water	03/06/14 13:30	03/06/14 21:45
Field Blank	14C0548-03	Water	03/06/14 12:50	03/06/14 21:45
Pond 9 EFF M-002	14C0548-04	Water	03/06/14 11:45	03/06/14 21:45
Pond 9 UP R-001B	14C0548-05	Water	03/06/14 11:55	03/06/14 21:45
Pond 9 DN R-002B	14C0548-06	Water	03/06/14 12:00	03/06/14 21:45
Pond 17 EFF M-004	14C0548-07	Water	03/06/14 13:55	03/06/14 21:45
Pond 17 DN R-002D	14C0548-08	Water	03/06/14 14:05	03/06/14 21:45



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 (Weekly)

Reported:

03/25/14 13:13

Metals by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4A EFF M-001 (14C0548-01) Water Sampled: 03/06/14 12:20 Received: 03/06/14 21:45										
Chromium, hexavalent	ND	0.0050	0.010	mg/l	1	AC41066	03/10/14 14:00	03/10/14 16:28	SM3500-Cr B	U
Mercury	1.30	0.200	0.500	ng/l	"	AC41936	03/21/14 10:00	03/21/14 16:01	EPA 1631E	
Pond 4 DN R-002A (14C0548-02) Water Sampled: 03/06/14 13:30 Received: 03/06/14 21:45										
Chromium, hexavalent	ND	0.0050	0.010	mg/l	1	AC41066	03/10/14 14:00	03/10/14 16:28	SM3500-Cr B	U
Mercury	1.82	0.200	0.500	ng/l	"	AC41936	03/21/14 10:00	03/21/14 16:09	EPA 1631E	
Field Blank (14C0548-03) Water Sampled: 03/06/14 12:50 Received: 03/06/14 21:45										
Mercury	ND	0.200	0.500	ng/l	1	AC41936	03/21/14 10:00	03/21/14 16:17	EPA 1631E	U

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 (Weekly)

Reported:

03/25/14 13:13

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond 4A EFF M-001 (14C0548-01) Water Sampled: 03/06/14 12:20 Received: 03/06/14 21:45										
Total Dissolved Solids	1000	5.0	10	mg/l	1	AC41218	03/12/14 10:45	03/17/14 15:00	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC41042	03/07/14 13:00	03/07/14 17:00	SM2540F	U
Pond 4 DN R-002A (14C0548-02) Water Sampled: 03/06/14 13:30 Received: 03/06/14 21:45										
Total Dissolved Solids	1100	5.0	10	mg/l	1	AC41218	03/12/14 10:45	03/17/14 15:00	SM2540C	
Pond 9 EFF M-002 (14C0548-04) Water Sampled: 03/06/14 11:45 Received: 03/06/14 21:45										
Total Dissolved Solids	930	5.0	10	mg/l	1	AC41218	03/12/14 10:45	03/17/14 15:00	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC41042	03/07/14 13:00	03/07/14 17:00	SM2540F	U
Pond 9 UP R-001B (14C0548-05) Water Sampled: 03/06/14 11:55 Received: 03/06/14 21:45										
Total Dissolved Solids	1100	5.0	10	mg/l	1	AC41218	03/12/14 10:45	03/17/14 15:00	SM2540C	
Pond 9 DN R-002B (14C0548-06) Water Sampled: 03/06/14 12:00 Received: 03/06/14 21:45										
Total Dissolved Solids	1100	5.0	10	mg/l	1	AC41218	03/12/14 10:45	03/17/14 15:00	SM2540C	
Pond 17 EFF M-004 (14C0548-07) Water Sampled: 03/06/14 13:55 Received: 03/06/14 21:45										
Total Dissolved Solids	1500	5.0	10	mg/l	1	AC41218	03/12/14 10:45	03/17/14 15:00	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC41042	03/07/14 13:00	03/07/14 17:00	SM2540F	U
Pond 17 DN R-002D (14C0548-08) Water Sampled: 03/06/14 14:05 Received: 03/06/14 21:45										
Total Dissolved Solids	1100	5.0	10	mg/l	1	AC41218	03/12/14 10:45	03/17/14 15:00	SM2540C	

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 (Weekly)

Reported:

03/25/14 13:13

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4A EFF M-001 (14C0548-01) Water Sampled: 03/06/14 12:20 Received: 03/06/14 21:45										
Chloride	13	0.75	12	mg/l	25	AC40832	03/08/14 10:26	03/09/14 07:18	EPA 300.0	
Pond 4 DN R-002A (14C0548-02) Water Sampled: 03/06/14 13:30 Received: 03/06/14 21:45										
Chloride	15	0.75	12	mg/l	25	AC40832	03/08/14 10:26	03/09/14 07:33	EPA 300.0	
Pond 9 EFF M-002 (14C0548-04) Water Sampled: 03/06/14 11:45 Received: 03/06/14 21:45										
Chloride	110	0.75	12	mg/l	25	AC40832	03/08/14 10:26	03/09/14 07:48	EPA 300.0	
Pond 9 UP R-001B (14C0548-05) Water Sampled: 03/06/14 11:55 Received: 03/06/14 21:45										
Chloride	30	0.75	12	mg/l	25	AC40832	03/08/14 10:26	03/09/14 08:03	EPA 300.0	
Pond 9 DN R-002B (14C0548-06) Water Sampled: 03/06/14 12:00 Received: 03/06/14 21:45										
Chloride	35	0.75	12	mg/l	25	AC40832	03/08/14 10:26	03/09/14 08:18	EPA 300.0	
Pond 17 EFF M-004 (14C0548-07) Water Sampled: 03/06/14 13:55 Received: 03/06/14 21:45										
Chloride	130	1.5	25	mg/l	50	AC40832	03/08/14 10:26	03/09/14 08:33	EPA 300.0	
Pond 17 DN R-002D (14C0548-08) Water Sampled: 03/06/14 14:05 Received: 03/06/14 21:45										
Chloride	39	0.75	12	mg/l	25	AC40832	03/08/14 10:26	03/09/14 08:48	EPA 300.0	

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Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914 (Weekly)

Reported:
03/25/14 13:13

Metals by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC41066 - SM3500 Cr6 Water

Blank (AC41066-BLK1)					Prepared & Analyzed: 03/10/14						
Chromium, hexavalent	ND	0.0050	0.010	mg/l							U
LCS (AC41066-BS1)					Prepared & Analyzed: 03/10/14						
Chromium, hexavalent	0.106	0.0050	0.010	mg/l	0.100		106	80-120			
Duplicate (AC41066-DUP1)					Source: 14C0328-01 Prepared & Analyzed: 03/10/14						
Chromium, hexavalent	ND	0.0050	0.010	mg/l		ND			20		U
Matrix Spike (AC41066-MS1)					Source: 14C0328-01 Prepared & Analyzed: 03/10/14						
Chromium, hexavalent	0.0961	0.0050	0.010	mg/l	0.100	ND	96.1	0-200			
Matrix Spike (AC41066-MS2)					Source: 14B1731-01 Prepared & Analyzed: 03/10/14						
Chromium, hexavalent	0.0886	0.0050	0.010	mg/l	0.100	ND	88.6	0-200			
Matrix Spike Dup (AC41066-MSD1)					Source: 14C0328-01 Prepared & Analyzed: 03/10/14						
Chromium, hexavalent	0.0950	0.0050	0.010	mg/l	0.100	ND	95.0	0-200	1.12	20	

Batch AC41936 - EPA 1631

Blank (AC41936-BLK1)					Prepared & Analyzed: 03/21/14						
Mercury	ND	0.200	0.500	ng/l							U
Mercury	ND	0.200	0.500	"							U
LCS (AC41936-BS1)					Prepared & Analyzed: 03/21/14						
Mercury	4.43	0.200	0.500	ng/l	5.00		88.5	77-123			
Matrix Spike (AC41936-MS1)					Source: 14C0523-01 Prepared & Analyzed: 03/21/14						
Mercury	24.0	0.200	0.500	ng/l	25.0	0.856	92.4	71-125			

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 (Weekly)

Reported:

03/25/14 13:13

Metals by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC41936 - EPA 1631

Matrix Spike Dup (AC41936-MSD1)

Source: 14C0523-01

Prepared & Analyzed: 03/21/14

Mercury	23.7	0.200	0.500	ng/l	25.0	0.856	91.3	71-125	1.22	24	
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Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 (Weekly)

Reported:

03/25/14 13:13

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AC41218 - General Preparation

Blank (AC41218-BLK1)

Prepared: 03/12/14 Analyzed: 03/17/14

Total Dissolved Solids	ND	5.0	10	mg/l						U
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Duplicate (AC41218-DUP1)

Source: 14C0548-01

Prepared: 03/12/14 Analyzed: 03/17/14

Total Dissolved Solids	996	5.0	10	mg/l		1020		2.38	30	
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Duplicate (AC41218-DUP2)

Source: 14C0548-02

Prepared: 03/12/14 Analyzed: 03/17/14

Total Dissolved Solids	1010	5.0	10	mg/l		1050		4.27	30	
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Dallas TX, 75266-0140

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Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914 (Weekly)

Reported:

03/25/14 13:13

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
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Batch AC40832 - General Preparation

Blank (AC40832-BLK1)

Prepared: 03/08/14 Analyzed: 03/09/14

Chloride	ND	0.030	0.50	mg/l					U
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LCS (AC40832-BS1)

Prepared: 03/08/14 Analyzed: 03/09/14

Chloride	11.5	0.030	0.50	mg/l	11.1	104	90-110		
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Duplicate (AC40832-DUP1)

Source: 14C0256-01

Prepared: 03/08/14 Analyzed: 03/09/14

Chloride	0.225	0.030	0.50	mg/l	0.227	0.885	20		J
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Matrix Spike (AC40832-MS1)

Source: 14C0256-01

Prepared: 03/08/14 Analyzed: 03/09/14

Chloride	11.4	0.030	0.50	mg/l	11.1	0.227	101	80-120	
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Matrix Spike Dup (AC40832-MSD1)

Source: 14C0256-01

Prepared: 03/08/14 Analyzed: 03/09/14

Chloride	11.5	0.030	0.50	mg/l	11.1	0.227	101	80-120	0.603	20
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Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914 (Weekly)

Reported:
03/25/14 13:13

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
U	Analyte included in analysis, but not detected at or above MDL.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

April 11, 2014

Alpha Analytical Laboratories Inc.
ATTN: Robbie Phillips
208 Mason St.
Ukiah, CA 95482
robbie@alpha-labs.com

RE: Project AAL-DB1301

Client Project: 14C0548

Dear Mr. Phillips,

On March 11, 2014, Brooks Rand Labs (BRL) received three (3) water samples. The samples were logged-in for the contracted analyses of total silver (Ag), arsenic (As), beryllium (Be), cadmium (Cd), chromium (Cr), copper (Cu), nickel (Ni), lead (Pb), antimony (Sb), selenium (Se), thallium (Tl), and zinc (Zn) according to the chain-of-custody (COC) forms. Samples for dissolved analyses were field filtered. The samples were received, prepared, analyzed, and stored according to BRL SOPs and EPA methodology.

The results were blank-corrected as described in the calculations section of the relevant SOP(s) and may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

In instances where the native sample result and/or the associated duplicate (DUP) result were below the MDL the RPD was not calculated (**N/C**).

When the spiking levels of the matrix spikes were $\leq 25\%$ of the native sample concentrations, the recoveries were not reported (**NR**).

The sample *14C0548-03 Field Blank* (1411012-13) was labeled as a field blank and had Cr, Cu, Pb, and Zn concentrations above the MRL. The Cr, Cu, Pb, and Zn results for the samples may demonstrate possible contamination through field sample collection techniques employed.

Aside from concentration qualifiers, all data was reported without qualification and all other associated quality control sample results met the acceptance criteria.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,



Lydia Greaves
Project Manager
lydia@brooksrands.com

Report Information

Laboratory Accreditation

BRL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BRL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <<http://www.brooksrand.com/default.asp?contentID=586>>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

BLK	method blank	MS	matrix spike
BRL	Brooks Rand Labs	MSD	matrix spike duplicate
BS	laboratory fortified blank	ND	non-detect
CAL	calibration standard	NR	non-reportable
CCV	continuing calibration verification	PS	post preparation spike
COC	chain of custody record	REC	percent recovery
CRM	certified reference material	RPD	relative percent difference
D	dissolved fraction	RSD	relative standard deviation
DUP	duplicate	SCV	secondary calibration verification
ICV	initial calibration verification	SOP	standard operating procedure
MDL	method detection limit	SRM	standard reference material
MRL	method reporting limit	T	total recoverable fraction
IBL	instrument blank		

Definition of Data Qualifiers

(Effective 9/23/09)

B	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Result is estimated.
J	Estimated value. A full explanation is presented in the narrative.
J-M	Duplicate precision (RPD) for associated QC sample was not within acceptance criteria. Result is estimated.
J-N	Spike recovery for associated QC sample was not within acceptance criteria. Result is estimated.
M	Duplicate precision (RPD) was not within acceptance criteria. Result is estimated.
N	Spike recovery was not within acceptance criteria. Result is estimated.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Rand Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BRL.



Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
14C0548-01 Pond 4A EFF M-001	1411012-01	Water	Sample	03/06/2014	03/11/2014
14C0548-02 Pond 4DN R-002A	1411012-02	Water	Sample	03/06/2014	03/11/2014
14C0548-03 Field Blank	1411012-03	DIW	Field Blank	03/06/2014	03/11/2014

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
Ag	Water	EPA 1638	03/14/2014	04/03/2014	B140563	1400285
As	Water	EPA 1638 DRC	03/14/2014	03/25/2014	B140421	1400245
Be	Water	EPA 1638	03/14/2014	04/03/2014	B140563	1400285
Cd	Water	EPA 1638	03/14/2014	04/03/2014	B140563	1400285
Cr	Water	EPA 1638 DRC	03/14/2014	03/20/2014	B140422	1400233
Cu	Water	EPA 1638	03/14/2014	04/03/2014	B140563	1400285
Ni	Water	EPA 1638 DRC	03/14/2014	03/28/2014	B140482	1400260
Pb	Water	EPA 1638	03/14/2014	04/03/2014	B140563	1400285
Sb	Water	EPA 1638	03/14/2014	04/03/2014	B140563	1400285
Se	Water	EPA 1638 DRC	03/14/2014	03/25/2014	B140421	1400245
Tl	Water	EPA 1638	03/14/2014	04/03/2014	B140563	1400285
Zn	Water	EPA 1638	03/14/2014	04/03/2014	B140563	1400285

Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
14C0548-01 Pond 4A EFF M-001										
1411012-01	Ag	Water	T	0.005	U	0.005	0.021	µg/L	B140563	1400285
1411012-01	As	Water	T	1.63		0.009	0.032	µg/L	B140421	1400245
1411012-01	Be	Water	T	0.053	U	0.053	0.158	µg/L	B140563	1400285
1411012-01	Cd	Water	T	1.31		0.007	0.021	µg/L	B140563	1400285
1411012-01	Cr	Water	T	0.265		0.009	0.032	µg/L	B140422	1400233
1411012-01	Cu	Water	T	1.63		0.042	0.126	µg/L	B140563	1400285
1411012-01	Ni	Water	T	59.4		0.053	0.211	µg/L	B140482	1400260
1411012-01	Pb	Water	T	0.047		0.006	0.026	µg/L	B140563	1400285
1411012-01	Sb	Water	T	5.68		0.011	0.042	µg/L	B140563	1400285
1411012-01	Se	Water	T	33.8		0.021	0.063	µg/L	B140421	1400245
1411012-01	Tl	Water	T	0.174		0.003	0.011	µg/L	B140563	1400285
1411012-01	Zn	Water	T	56.8		0.06	0.21	µg/L	B140563	1400285
14C0548-02 Pond 4DN R-002A										
1411012-02	Ag	Water	T	0.005	U	0.005	0.021	µg/L	B140563	1400285
1411012-02	As	Water	T	0.521		0.009	0.032	µg/L	B140421	1400245
1411012-02	Be	Water	T	0.053	U	0.053	0.158	µg/L	B140563	1400285
1411012-02	Cd	Water	T	0.522		0.007	0.021	µg/L	B140563	1400285
1411012-02	Cr	Water	T	0.262		0.009	0.032	µg/L	B140422	1400233
1411012-02	Cu	Water	T	1.33		0.042	0.126	µg/L	B140563	1400285
1411012-02	Ni	Water	T	17.1		0.053	0.211	µg/L	B140482	1400260
1411012-02	Pb	Water	T	0.035		0.006	0.026	µg/L	B140563	1400285
1411012-02	Sb	Water	T	3.11		0.011	0.042	µg/L	B140563	1400285
1411012-02	Se	Water	T	44.2		0.021	0.063	µg/L	B140421	1400245
1411012-02	Tl	Water	T	0.043		0.003	0.011	µg/L	B140563	1400285
1411012-02	Zn	Water	T	2.60		0.06	0.21	µg/L	B140563	1400285
14C0548-03 Field Blank										
1411012-03	Ag	DIW	T	0.005	U	0.005	0.021	µg/L	B140563	1400285
1411012-03	As	DIW	T	0.009	U	0.009	0.032	µg/L	B140421	1400245
1411012-03	Be	DIW	T	0.053	U	0.053	0.158	µg/L	B140563	1400285
1411012-03	Cd	DIW	T	0.007	U	0.007	0.021	µg/L	B140563	1400285
1411012-03	Cr	DIW	T	0.053		0.009	0.032	µg/L	B140422	1400233
1411012-03	Cu	DIW	T	0.462		0.042	0.126	µg/L	B140563	1400285
1411012-03	Ni	DIW	T	0.053	U	0.053	0.211	µg/L	B140482	1400260
1411012-03	Pb	DIW	T	0.154		0.006	0.026	µg/L	B140563	1400285
1411012-03	Sb	DIW	T	0.011	U	0.011	0.042	µg/L	B140563	1400285
1411012-03	Se	DIW	T	0.021	U	0.021	0.063	µg/L	B140421	1400245
1411012-03	Tl	DIW	T	0.003	U	0.003	0.011	µg/L	B140563	1400285
1411012-03	Zn	DIW	T	0.50		0.06	0.21	µg/L	B140563	1400285

Accuracy & Precision Summary

Batch: B140421
Lab Matrix: Water
Method: EPA 1638 DRC

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140421-BS1	Laboratory Fortified Blank (1411078)						
	As		5.684	5.618	µg/L	99% 75-125	
	Se		10.53	10.37	µg/L	99% 75-125	
B140421-SRM1	Certified Reference Material (1323040, NIST 1643e)						
	As		60.45	60.55	µg/L	100% 75-125	
	Se		11.97	12.80	µg/L	107% 75-125	
B140421-DUP1	Duplicate (1411012-01)						
	As	1.631		1.616	µg/L		0.9% 20
B140421-DUP4	Duplicate (1411012-01)						
	Se	33.84		34.59	µg/L		2% 20
B140421-MS1	Matrix Spike (1411012-01)						
	As	1.631	5.263	7.013	µg/L	102% 75-125	
B140421-MS4	Matrix Spike (1411012-01)						
	Se	33.84	52.63	79.46	µg/L	87% 75-125	
B140421-MSD1	Matrix Spike Duplicate (1411012-01)						
	As	1.631	5.263	7.020	µg/L	102% 75-125	0.1% 20
B140421-MSD4	Matrix Spike Duplicate (1411012-01)						
	Se	33.84	52.63	79.27	µg/L	86% 75-125	0.2% 20

Accuracy & Precision Summary

Batch: B140422
Lab Matrix: Water
Method: EPA 1638 DRC

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140422-BS1	Laboratory Fortified Blank (1411078)						
	Cr		3.162	3.174	µg/L	100% 75-125	
B140422-SRM1	Certified Reference Material (1323040, NIST 1643e)						
	Cr		20.40	20.21	µg/L	99% 75-125	
B140422-SRM2	Certified Reference Material (1352079, Fe, Ca check (SCV3 as SRM))						
	Cr		50.00	49.49	µg/L	99% 0-200	
B140422-DUP1	Duplicate (1411012-01)						
	Cr	0.265		0.252	µg/L		5% 20
B140422-MS1	Matrix Spike (1411012-01)						
	Cr	0.265	105.4	98.70	µg/L	93% 75-125	
B140422-MSD1	Matrix Spike Duplicate (1411012-01)						
	Cr	0.265	105.4	99.82	µg/L	94% 75-125	1% 20

Accuracy & Precision Summary

Batch: B140482
Lab Matrix: Water
Method: EPA 1638 DRC

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140482-BS1	Laboratory Fortified Blank (1411078) Ni		4.211	4.204	µg/L	100% 75-125	
B140482-SRM1	Certified Reference Material (1323040, NIST 1643e) Ni		62.41	59.82	µg/L	96% 75-125	
B140482-DUP1	Duplicate (1411012-01) Ni	59.39		60.17	µg/L		1% 20
B140482-MS1	Matrix Spike (1411012-01) Ni	59.39	526.3	543.2	µg/L	92% 75-125	
B140482-MSD1	Matrix Spike Duplicate (1411012-01) Ni	59.39	526.3	541.5	µg/L	92% 75-125	0.3% 20

Accuracy & Precision Summary

Batch: B140563

Lab Matrix: Water

Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140563-BS1	Laboratory Fortified Blank (1411078)						
	Ag		0.4211	0.459	µg/L	109% 75-125	
	Be		3.158	3.213	µg/L	102% 75-125	
	Cd		0.4211	0.424	µg/L	101% 75-125	
	Cu		2.526	2.562	µg/L	101% 75-125	
	Pb		0.5259	0.547	µg/L	104% 75-125	
	Sb		0.4211	0.416	µg/L	99% 75-125	
	Tl		0.2105	0.219	µg/L	104% 75-125	
	Zn		4.211	4.20	µg/L	100% 75-125	
B140563-SRM1	Certified Reference Material (1414026, NIST 1640a)						
	Ag		8.081	8.334	µg/L	103% 75-125	
	Be		3.026	2.841	µg/L	94% 75-125	
	Cd		3.992	3.878	µg/L	97% 75-125	
	Cu		85.75	84.24	µg/L	98% 75-125	
	Pb		12.10	12.13	µg/L	100% 75-125	
	Sb		5.105	4.949	µg/L	97% 75-125	
	Tl		1.619	1.637	µg/L	101% 75-125	
	Zn		55.64	55.21	µg/L	99% 75-125	
B140563-DUP1	Duplicate (1411012-01)						
	Ag	ND		ND	µg/L		N/C 20
	Be	ND		ND	µg/L		N/C 20
	Cd	1.308		1.330	µg/L		2% 20
	Cu	1.632		1.591	µg/L		3% 20
	Pb	0.047		0.043	µg/L		10% 20
	Sb	5.683		5.652	µg/L		0.5% 20
	Tl	0.174		0.171	µg/L		2% 20
	Zn	56.80		57.93	µg/L		2% 20

Accuracy & Precision Summary

Batch: B140563

Lab Matrix: Water

Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B140563-MS1	Matrix Spike (1411012-01)						
	Ag	ND	0.4211	0.352	µg/L	83% 75-125	
	Be	ND	0.2105	0.179	µg/L	85% 75-125	
	Cd	1.308	0.2105	1.529	µg/L	NR 75-125	
	Cu	1.632	2.105	3.511	µg/L	89% 75-125	
	Pb	0.047	0.5259	0.505	µg/L	87% 75-125	
	Sb	5.683	0.2105	5.841	µg/L	NR 75-125	
	Tl	0.174	0.1053	0.263	µg/L	85% 75-125	
	Zn	56.80	10.53	65.88	µg/L	NR 75-125	
B140563-MSD1	Matrix Spike Duplicate (1411012-01)						
	Ag	ND	0.4211	0.337	µg/L	80% 75-125	4% 20
	Be	ND	0.2105	0.184	µg/L	88% 75-125	3% 20
	Cd	1.308	0.2105	1.561	µg/L	NR 75-125	2% 20
	Cu	1.632	2.105	3.530	µg/L	90% 75-125	0.6% 20
	Pb	0.047	0.5259	0.501	µg/L	86% 75-125	0.7% 20
	Sb	5.683	0.2105	5.882	µg/L	NR 75-125	0.7% 20
	Tl	0.174	0.1053	0.257	µg/L	79% 75-125	2% 20
	Zn	56.80	10.53	66.28	µg/L	NR 75-125	0.6% 20

Method Blanks & Reporting Limits

Batch: B140421

Matrix: Water

Method: EPA 1638 DRC

Analyte: As 91

Sample	Result	Units		
B140421-BLK1	0.005	µg/L		
B140421-BLK2	0.005	µg/L		
B140421-BLK3	0.003	µg/L		
B140421-BLK4	0.002	µg/L		
Average: 0.004		Standard Deviation: 0.002	MDL: 0.009	
Limit: 0.032		Limit: 0.009	MRL: 0.032	

Analyte: Se 78

Sample	Result	Units		
B140421-BLK1	0.012	µg/L		
B140421-BLK2	0.017	µg/L		
B140421-BLK3	0.003	µg/L		
B140421-BLK4	0.003	µg/L		
Average: 0.009		Standard Deviation: 0.007	MDL: 0.021	
Limit: 0.063		Limit: 0.021	MRL: 0.063	

Method Blanks & Reporting Limits

Batch: B140422
Matrix: Water
Method: EPA 1638 DRC
Analyte: Cr 52

Sample	Result	Units		
B140422-BLK1	0.002	µg/L		
B140422-BLK2	0.001	µg/L		
B140422-BLK3	0.001	µg/L		
B140422-BLK4	0.002	µg/L		
Average: 0.002		Standard Deviation: 0.001	MDL: 0.009	
Limit: 0.032		Limit: 0.009	MRL: 0.032	

Method Blanks & Reporting Limits

Batch: B140482
Matrix: Water
Method: EPA 1638 DRC
Analyte: Ni 62

Sample	Result	Units		
B140482-BLK1	0.003	µg/L		
B140482-BLK2	-0.003	µg/L		
B140482-BLK3	-0.003	µg/L		
B140482-BLK4	0.002	µg/L		
Average: 0.000		Standard Deviation: 0.003	MDL: 0.053	
Limit: 0.211		Limit: 0.053	MRL: 0.211	

Method Blanks & Reporting Limits

Batch: B140563
Matrix: Water
Method: EPA 1638
Analyte: Ag 107

Sample	Result	Units		
B140563-BLK1	-0.0006	µg/L		
B140563-BLK2	-0.0007	µg/L		
B140563-BLK3	-0.0008	µg/L		
B140563-BLK4	-0.001	µg/L		
Average: -0.001		Standard Deviation: 0.000	MDL: 0.005	
Limit: 0.021		Limit: 0.005	MRL: 0.021	

Analyte: Be

Sample	Result	Units		
B140563-BLK1	-0.013	µg/L		
B140563-BLK2	-0.011	µg/L		
B140563-BLK3	-0.010	µg/L		
B140563-BLK4	-0.013	µg/L		
Average: -0.012		Standard Deviation: 0.002	MDL: 0.053	
Limit: 0.158		Limit: 0.053	MRL: 0.158	

Analyte: Cd 114

Sample	Result	Units		
B140563-BLK1	-0.0002	µg/L		
B140563-BLK2	-0.0008	µg/L		
B140563-BLK3	-0.0001	µg/L		
B140563-BLK4	0.00001	µg/L		
Average: 0.000		Standard Deviation: 0.000	MDL: 0.007	
Limit: 0.021		Limit: 0.007	MRL: 0.021	

Method Blanks & Reporting Limits

Analyte: Cu 63

Sample	Result	Units		
B140563-BLK1	-0.012	µg/L		
B140563-BLK2	-0.012	µg/L		
B140563-BLK3	-0.012	µg/L		
B140563-BLK4	-0.013	µg/L		
Average: -0.012		Standard Deviation: 0.001	MDL: 0.042	
Limit: 0.126		Limit: 0.042	MRL: 0.126	

Analyte: Pb

Sample	Result	Units		
B140563-BLK1	-0.001	µg/L		
B140563-BLK2	-0.001	µg/L		
B140563-BLK3	-0.001	µg/L		
B140563-BLK4	-0.001	µg/L		
Average: -0.001		Standard Deviation: 0.000	MDL: 0.006	
Limit: 0.026		Limit: 0.006	MRL: 0.026	

Analyte: Sb

Sample	Result	Units		
B140563-BLK1	-0.00007	µg/L		
B140563-BLK2	-0.0001	µg/L		
B140563-BLK3	0.0002	µg/L		
B140563-BLK4	-0.0003	µg/L		
Average: 0.000		Standard Deviation: 0.000	MDL: 0.011	
Limit: 0.042		Limit: 0.011	MRL: 0.042	

Analyte: Tl

Sample	Result	Units		
B140563-BLK1	-0.0009	µg/L		
B140563-BLK2	-0.001	µg/L		
B140563-BLK3	-0.0009	µg/L		
B140563-BLK4	-0.0008	µg/L		
Average: -0.001		Standard Deviation: 0.000	MDL: 0.003	
Limit: 0.011		Limit: 0.003	MRL: 0.011	

Method Blanks & Reporting Limits

Analyte: Zn 66

Sample	Result	Units			
B140563-BLK1	0.001	µg/L			
B140563-BLK2	-0.003	µg/L			
B140563-BLK3	-0.003	µg/L			
B140563-BLK4	-0.003	µg/L			
Average: 0.00			Standard Deviation: 0.00	MDL: 0.06	
Limit: 0.21			Limit: 0.06	MRL: 0.21	

Project ID: AAL-DB1301
PM: Lydia Greaves



BRL Report 1411012
Client PM: Robbie Phillips
Client PO: 130903RP-1

Sample Containers

Lab ID: 1411012-01		Report Matrix: Water		Collected: 03/06/2014	
Sample: 14C0548-01 Pond 4A EFF M-001		Sample Type: Sample		Received: 03/11/2014	
Des	Container	Size	Lot	Preservation	P-Lot
A	Client-Provided	500mL	NOT PROVIDE D	0.1% HNO3 (BRL)	1350086
				pH	Ship. Cont.
				<2	Cooler
Lab ID: 1411012-02		Report Matrix: Water		Collected: 03/06/2014	
Sample: 14C0548-02 Pond 4DN R-002A		Sample Type: Sample		Received: 03/11/2014	
Des	Container	Size	Lot	Preservation	P-Lot
A	Client-Provided	500mL	NOT PROVIDE D	0.1% HNO3 (BRL)	1350086
				pH	Ship. Cont.
				<2	Cooler
Lab ID: 1411012-03		Report Matrix: DIW		Collected: 03/06/2014	
Sample: 14C0548-03 Field Blank		Sample Type: Field Blank		Received: 03/11/2014	
Des	Container	Size	Lot	Preservation	P-Lot
A	Client-Provided	500mL	NOT PROVIDE D	0.1% HNO3 (BRL)	1350086
				pH	Ship. Cont.
					Cooler

Shipping Containers

Cooler

Received: March 11, 2014 9:10
Tracking No: 1z8942500146980933 via UPS
Coolant Type: Blue Ice
Temperature: -0.5 °C

Description: Cooler
Damaged in transit? No
Returned to client? No

Custody seals present? Yes
Custody seals intact? Yes
COC present? Yes

SUBCONTRACT ORDER
Alpha Analytical Laboratories, Inc.
14C0548

BRL Report 1411012

1411012

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: Robbie C. Phillips

RECEIVING LABORATORY:

Brooks Rand Labs, LLC
3958 6th Avenue NW
Seattle, WA 98107
Phone: (206) 632-6206
Fax: (206) 632-6017
Terms: Net 30

Analysis	Due	Expires	Comments
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14C0548-01 Pond 4A EFF M-001 [Water] Sampled 03/06/14 12:20 Pacific

1638 Sb Total ICPMS	03/24/14 12:00	09/02/14 12:20
1638 Ag Total ICPMS	03/24/14 12:00	09/02/14 12:20
1638 Zn Total ICPMS	03/24/14 12:00	09/02/14 12:20
1638 Se Total ICPMS	03/24/14 12:00	09/02/14 12:20
1638 Pb Total ICPMS	03/24/14 12:00	09/02/14 12:20
1638 Ni Total ICPMS	03/24/14 12:00	09/02/14 12:20
1638 Cu Total ICPMS	03/24/14 12:00	09/02/14 12:20
1638 Cr Total ICPMS	03/24/14 12:00	09/02/14 12:20
1638 Cd Total ICPMS	03/24/14 12:00	09/02/14 12:20
1638 Be Total ICPMS	03/24/14 12:00	09/02/14 12:20
1638 As Total ICPMS	03/24/14 12:00	09/02/14 12:20
1638 Ti Total ICPMS	03/24/14 12:00	09/02/14 12:20

Containers Supplied:

500ml Glass - Unpreserve

14C0548-02 Pond 4 DN R-002A [Water] Sampled 03/06/14 13:30 Pacific

1638 Ni Total ICPMS	03/24/14 12:00	09/02/14 13:30
1638 Cu Total ICPMS	03/24/14 12:00	09/02/14 13:30
1638 Ag Total ICPMS	03/24/14 12:00	09/02/14 13:30
1638 As Total ICPMS	03/24/14 12:00	09/02/14 13:30
1638 Be Total ICPMS	03/24/14 12:00	09/02/14 13:30
1638 Cd Total ICPMS	03/24/14 12:00	09/02/14 13:30
1638 Pb Total ICPMS	03/24/14 12:00	09/02/14 13:30
1638 Sb Total ICPMS	03/24/14 12:00	09/02/14 13:30
1638 Se Total ICPMS	03/24/14 12:00	09/02/14 13:30
1638 Ti Total ICPMS	03/24/14 12:00	09/02/14 13:30
1638 Zn Total ICPMS	03/24/14 12:00	09/02/14 13:30
1638 Cr Total ICPMS	03/24/14 12:00	09/02/14 13:30

Containers Supplied:

500ml Glass - Unpreserve

	3-6-14	MR	3/11/14 0910
Released By	Date	Received By	Date

Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Alpha Analytical Laboratories, Inc.
14C0548

141102 BRL Report 1411012

Analysis	Due	Expires	Comments
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14C0548-03 Field Blank [Water] Sampled 03/06/14 12:50 Pacific

1638 Be Total ICPMS	03/24/14 12:00	09/02/14 12:50
1638 Tl Total ICPMS	03/24/14 12:00	09/02/14 12:50
1638 Se Total ICPMS	03/24/14 12:00	09/02/14 12:50
1638 Sb Total ICPMS	03/24/14 12:00	09/02/14 12:50
1638 Pb Total ICPMS	03/24/14 12:00	09/02/14 12:50
1638 Ni Total ICPMS	03/24/14 12:00	09/02/14 12:50
1638 Cu Total ICPMS	03/24/14 12:00	09/02/14 12:50
1638 Cd Total ICPMS	03/24/14 12:00	09/02/14 12:50
1638 Zn Total ICPMS	03/24/14 12:00	09/02/14 12:50
1638 As Total ICPMS	03/24/14 12:00	09/02/14 12:50
1638 Ag Total ICPMS	03/24/14 12:00	09/02/14 12:50
1638 Cr Total ICPMS	03/24/14 12:00	09/02/14 12:50

Containers Supplied:

500ml Glass - Unpreserve

☐ Report to State

System Name: _____

Employed by: _____

User ID: _____

Sampler: _____

System Number: _____

+QC
+J-Flags

Released By

Date

Received By

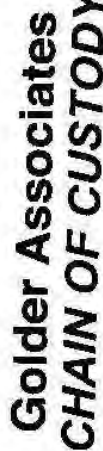
Date

Released By

Date

Received By

Date



14C0548

Page 7 of 7

Quotation No P0#4500554289

PROJECT NO.:		SITE NAME: (weekly)		ANALYSES		Quotation No. 1014500554289	
SAMPLER(S):		Lehigh State permit		Tot Set mat		TDS, chloride	
David Waite (printed)		David C. Hatt (signature)		1600 Services		Mercury 1631	
CONTRACT LABORATORY:		Alpha		Type/Vol.		Cont. Qty.	
TURN-AROUND TIME:		Standard		Container Info		Remarks	
Sample I.D.	Lab I.D.	Collection		Matrix	Depth	Filter	Preserv.
		Date	Time				
Pond 4A Eff m-001		3-6-14	1220	W			
Pond 4DN R-003A			1330				
Field Blank			1250				
Pond 9A Eff m-002			1145				
Pond 9UP R-001B			1155				
Pond 9AN R-002B			1200				
Pond 17 Eff m-004			1355				
Pond 17DN R-002D			1405				

Relinquished by: (signature) *David C. Hatt*

Relinquished by: (signature) *Jim Spahn*

Relinquished by: (signature) *Walt*

Received by: (signature) *Jim Spahn*

Received by: (signature) *Walt*

Received by: (signature) *Walt*

Date/Time: 3/6/14 16:05

Date/Time: 3-6-14 1400

Date/Time: 3-6-14 2015

SEND RESULTS TO:

Attn: George Wegmann, Greg Knapp,
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

Chow Yip

White: lab copy

Yellow: protect file

white: lab copy
yellow: project file



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

ELAP Certificate Numbers 1551 and 2728

19 March 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14C0658

Enclosed are the results of analyses for samples received by the laboratory on 03/10/14 21:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/19/14 15:13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 4A Composite	14C0658-01	Water	03/07/14 12:15	03/10/14 21:40
Pond 9 Composite	14C0658-02	Water	03/07/14 11:25	03/10/14 21:40
Pond 17 Composite	14C0658-03	Water	03/07/14 11:45	03/10/14 21:40



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/19/14 15:13

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4A Composite (14C0658-01) Water	Sampled: 03/07/14 12:15	Received: 03/10/14 21:40								
Total Suspended Solids	1.5	0.30	0.50	mg/l	1	AC41333	03/13/14 16:00	03/17/14 15:30	SM2540D	
Pond 9 Composite (14C0658-02) Water	Sampled: 03/07/14 11:25	Received: 03/10/14 21:40								
Total Suspended Solids	6.6	0.30	0.50	mg/l	1	AC41333	03/13/14 16:00	03/17/14 15:30	SM2540D	
Pond 17 Composite (14C0658-03) Water	Sampled: 03/07/14 11:45	Received: 03/10/14 21:40								
Total Suspended Solids	80	0.30	0.50	mg/l	1	AC41333	03/13/14 16:00	03/17/14 15:30	SM2540D	



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/19/14 15:13

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch AC41333 - General Preparation

Blank (AC41333-BLK1)

Prepared: 03/13/14 Analyzed: 03/17/14

Total Suspended Solids	ND	0.30	0.50	mg/l							U
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Duplicate (AC41333-DUP1)

Source: 14C0622-01

Prepared: 03/13/14 Analyzed: 03/17/14

Total Suspended Solids	180	0.30	0.50	mg/l		200			10.5	30	
------------------------	-----	------	------	------	--	-----	--	--	------	----	--

Duplicate (AC41333-DUP2)

Source: 14C0689-01

Prepared: 03/13/14 Analyzed: 03/17/14

Total Suspended Solids	227	0.30	0.50	mg/l		207			9.23	30	
------------------------	-----	------	------	------	--	-----	--	--	------	----	--



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/19/14 15:13

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



85907h1

Page 1 of 1
Quotation No **Po# 4500554284**

[illegible]



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ELAP Certificate Numbers 1551 and 2728

27 March 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14C1051

Enclosed are the results of analyses for samples received by the laboratory on 03/13/14 22:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/27/14 10:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 4A Eff M-001	14C1051-01	Water	03/13/14 14:00	03/13/14 22:10
Pond 4A DN R-002A	14C1051-02	Water	03/13/14 10:40	03/13/14 22:10
Pond 9 Eff M-002	14C1051-03	Water	03/13/14 11:00	03/13/14 22:10
Pond 9 UP R-001B	14C1051-04	Water	03/13/14 11:10	03/13/14 22:10
Pond 9 DN R-002B	14C1051-05	Water	03/13/14 11:15	03/13/14 22:10



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/27/14 10:06

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4A Eff M-001 (14C1051-01) Water Sampled: 03/13/14 14:00 Received: 03/13/14 22:10										
Total Dissolved Solids	970	5.0	10	mg/l	1	AC41950	03/19/14 15:00	03/24/14 12:15	SM2540C	U
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC41741	03/14/14 14:00	03/14/14 17:00	SM2540F	
Pond 4A DN R-002A (14C1051-02) Water Sampled: 03/13/14 10:40 Received: 03/13/14 22:10										
Total Dissolved Solids	950	5.0	10	mg/l	1	AC41950	03/19/14 15:00	03/24/14 12:15	SM2540C	
Pond 9 Eff M-002 (14C1051-03) Water Sampled: 03/13/14 11:00 Received: 03/13/14 22:10										
Total Dissolved Solids	1100	5.0	10	mg/l	1	AC41950	03/19/14 15:00	03/24/14 12:15	SM2540C	U
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC41741	03/14/14 14:00	03/14/14 17:00	SM2540F	
Pond 9 UP R-001B (14C1051-04) Water Sampled: 03/13/14 11:10 Received: 03/13/14 22:10										
Total Dissolved Solids	1000	5.0	10	mg/l	1	AC41950	03/19/14 15:00	03/24/14 12:15	SM2540C	
Pond 9 DN R-002B (14C1051-05) Water Sampled: 03/13/14 11:15 Received: 03/13/14 22:10										
Total Dissolved Solids	1000	5.0	10	mg/l	1	AC41950	03/19/14 15:00	03/24/14 12:15	SM2540C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/27/14 10:06

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4A Eff M-001 (14C1051-01) Water Sampled: 03/13/14 14:00 Received: 03/13/14 22:10										
Chloride	12	0.15	2.5	mg/l	5	AC42226	03/22/14 09:33	03/22/14 16:31	EPA 300.0	
Pond 4A DN R-002A (14C1051-02) Water Sampled: 03/13/14 10:40 Received: 03/13/14 22:10										
Chloride	13	0.15	2.5	mg/l	5	AC42226	03/22/14 09:33	03/22/14 16:46	EPA 300.0	
Pond 9 Eff M-002 (14C1051-03) Water Sampled: 03/13/14 11:00 Received: 03/13/14 22:10										
Chloride	94	0.75	12	mg/l	25	AC42226	03/22/14 09:33	03/22/14 17:01	EPA 300.0	
Pond 9 UP R-001B (14C1051-04) Water Sampled: 03/13/14 11:10 Received: 03/13/14 22:10										
Chloride	26	0.30	5.0	mg/l	10	AC42226	03/22/14 09:33	03/22/14 17:16	EPA 300.0	
Pond 9 DN R-002B (14C1051-05) Water Sampled: 03/13/14 11:15 Received: 03/13/14 22:10										
Chloride	84	0.75	12	mg/l	25	AC42226	03/22/14 09:33	03/22/14 17:31	EPA 300.0	

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/27/14 10:06

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AC41950 - General Preparation

Blank (AC41950-BLK1)

Prepared: 03/19/14 Analyzed: 03/24/14

Total Dissolved Solids	ND	5.0	10	mg/l						U
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Duplicate (AC41950-DUP1)

Source: 14C0926-01

Prepared: 03/19/14 Analyzed: 03/24/14

Total Dissolved Solids	680	5.0	10	mg/l		672		1.18	30	
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Duplicate (AC41950-DUP2)

Source: 14C0926-07

Prepared: 03/19/14 Analyzed: 03/24/14

Total Dissolved Solids	676	5.0	10	mg/l		704		4.06	30	
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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
03/27/14 10:06

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC42226 - General Preparation

Blank (AC42226-BLK1)

Prepared & Analyzed: 03/22/14

Chloride	ND	0.030	0.50	mg/l							U
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LCS (AC42226-BS1)

Prepared & Analyzed: 03/22/14

Chloride	11.0	0.030	0.50	mg/l	11.1		99.2	90-110			
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Duplicate (AC42226-DUP1)

Source: 14C0928-01

Prepared & Analyzed: 03/22/14

Chloride	19.1	0.030	0.50	mg/l		19.0			0.394	20	
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Matrix Spike (AC42226-MS1)

Source: 14C0928-01

Prepared & Analyzed: 03/22/14

Chloride	29.0	0.15	2.5	mg/l	11.1	19.0	90.0	80-120			
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Matrix Spike (AC42226-MS2)

Source: 14C1380-01

Prepared & Analyzed: 03/22/14

Chloride	63.6	0.15	2.5	mg/l	11.1	52.5	100	80-120			
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Matrix Spike Dup (AC42226-MSD1)

Source: 14C0928-01

Prepared & Analyzed: 03/22/14

Chloride	29.2	0.15	2.5	mg/l	11.1	19.0	91.5	80-120	0.573	20	
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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/27/14 10:06

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates CHAIN OF CUSTODY

14C1051

Page 1 of 1
Quotation No. PO #4500554209

PROJECT NO.:		SITE NAME:		ANALYSES			
063-7109-914		Weekly		<div>EDD required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</div> <div>EDF required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</div>			
SAMPLER(S): David Walter (printed) David C. Selt (signature)		Lehigh 9+6 permit					
CONTRACT LABORATORY:		Alpha		TDS, Chloride To + Set Mat			
TURN-AROUND TIME:		Standard					
Sample I.D.	Lab I.D.	Collection		Matrix	Depth	Type/Vol. Filter Preserv.	Container Info
		Date	Time				
Pond 4A Eff M-001	9-13-14	1400	W				
Pond 4A DN R-002A	1040						
Pond 9 Eff M-002	1100						
Pond 9A R-001B	1110						
Pond 9DN R-002B	1115						
SEND RESULTS TO: Attn: George Wegmann, Greg Knapp, Chow Pip Golder Associates Inc. 425 Lakeside Drive Sunnyvale, CA 94085 Phone (408) 220-9223 Fax (408) 220-9224							



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ELAP Certificate Numbers 1551 and 2728

31 March 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14C1108

Enclosed are the results of analyses for samples received by the laboratory on 03/15/14 14:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/31/14 13:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 4A Composite	14C1108-01	Water	03/14/14 10:40	03/15/14 14:30
Pond 9 Composite	14C1108-02	Water	03/14/14 11:20	03/15/14 14:30



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/31/14 13:10

Conventional Chemistry Parameters by APHA/EPA Methods

Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4A Composite (14C1108-01) Water Sampled: 03/14/14 10:40 Received: 03/15/14 14:30										
Total Suspended Solids	3.6	0.30	0.50	mg/l	1	AC41861	03/19/14 10:00	03/19/14 15:30	SM2540D	
Pond 9 Composite (14C1108-02) Water Sampled: 03/14/14 11:20 Received: 03/15/14 14:30										
Total Suspended Solids	25	0.30	0.50	mg/l	1	AC41861	03/19/14 10:00	03/19/14 15:30	SM2540D	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/31/14 13:10

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch AC41861 - General Preparation

Blank (AC41861-BLK1)

Prepared & Analyzed: 03/19/14

Total Suspended Solids	ND	0.30	0.50	mg/l							U
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Duplicate (AC41861-DUP1)

Source: 14C1108-02

Prepared & Analyzed: 03/19/14

Total Suspended Solids	20.0	0.30	0.50	mg/l		25.0			22.2	30	
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Duplicate (AC41861-DUP2)

Source: 14C1179-01

Prepared & Analyzed: 03/19/14

Total Suspended Solids	13.7	0.30	0.50	mg/l		11.2			20.1	30	
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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

03/31/14 13:10

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates CHAIN OF CUSTODY

14C1108

Page 1 of 1
Quotation No. 70 # 4500554209

PROJECT NO.:		SITE NAME:		ANALYSES				
063-7109-914		Composite Behigh St 6 permit		<div>EDD required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</div> <div>EDF required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</div>				
SAMPLER(S): Jeff Under		(signature)						
CONTRACT LABORATORY: Alph		Container Info						
TURN-AROUND TIME: Standard								
Sample I.D.	Lab I.D.	Collection Date	Collection Time	Matrix	Depth	Type/Vol. Filter Preserv.	Cont. Qty.	Remarks
Pond 4A Composite		3-14-14	1240	W			1	
Pond 9 Composite		3-14-14	1120	W			1	
SEND RESULTS TO:								
Relinquished by: (signature)			Received by: (signature)			Date/Time: 3/14/14 1435		
Relinquished by: (signature)			Received by: (signature)			Date/Time: 3-14-15		
Relinquished by: (signature)			Received by: (signature)			Date/Time: 3-14-15 1430		
white: lab copy			yellow: project file			3/15/14		

Attn: George Wegmann, Greg Krappi
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224



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ELAP Certificate Numbers 1551 and 2728

04 April 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14C1491

Enclosed are the results of analyses for samples received by the laboratory on 03/20/14 21:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



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Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

04/04/14 11:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 4 EFF M-001	14C1491-01	Water	03/20/14 09:00	03/20/14 21:45
Pond 4A DN R-002A	14C1491-02	Water	03/20/14 10:50	03/20/14 21:45
Pond 9 Eff M-002	14C1491-03	Water	03/20/14 11:05	03/20/14 21:45
Pond 9 UP R-001B	14C1491-04	Water	03/20/14 11:15	03/20/14 21:45
Pond 9 DN R-002B	14C1491-05	Water	03/20/14 11:20	03/20/14 21:45



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

04/04/14 11:36

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4 EFF M-001 (14C1491-01) Water	Sampled: 03/20/14 09:00	Received: 03/20/14 21:45								
Total Dissolved Solids	1000	5.0	10	mg/l	1	AC42646	03/26/14 16:00	03/28/14 16:00	SM2540C	U
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC42420	03/21/14 13:00	03/21/14 17:00	SM2540F	
Pond 4A DN R-002A (14C1491-02) Water	Sampled: 03/20/14 10:50	Received: 03/20/14 21:45								
Total Dissolved Solids	1100	5.0	10	mg/l	1	AC42646	03/26/14 16:00	03/28/14 16:00	SM2540C	
Pond 9 Eff M-002 (14C1491-03) Water	Sampled: 03/20/14 11:05	Received: 03/20/14 21:45								
Total Dissolved Solids	960	5.0	10	mg/l	1	AC42646	03/26/14 16:00	03/28/14 16:00	SM2540C	U
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC42420	03/21/14 13:00	03/21/14 17:00	SM2540F	
Pond 9 UP R-001B (14C1491-04) Water	Sampled: 03/20/14 11:15	Received: 03/20/14 21:45								
Total Dissolved Solids	1000	5.0	10	mg/l	1	AC42646	03/26/14 16:00	03/28/14 16:00	SM2540C	
Pond 9 DN R-002B (14C1491-05) Water	Sampled: 03/20/14 11:20	Received: 03/20/14 21:45								
Total Dissolved Solids	980	5.0	10	mg/l	1	AC42646	03/26/14 16:00	03/28/14 16:00	SM2540C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

04/04/14 11:36

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4 EFF M-001 (14C1491-01) Water Sampled: 03/20/14 09:00 Received: 03/20/14 21:45										
Chloride	13	0.60	10	mg/l	20	AC42227	03/22/14 09:41	03/23/14 01:04	EPA 300.0	
Pond 4A DN R-002A (14C1491-02) Water Sampled: 03/20/14 10:50 Received: 03/20/14 21:45										
Chloride	13	0.60	10	mg/l	20	AC42227	03/22/14 09:41	03/23/14 01:19	EPA 300.0	
Pond 9 Eff M-002 (14C1491-03) Water Sampled: 03/20/14 11:05 Received: 03/20/14 21:45										
Chloride	110	0.75	12	mg/l	25	AC42227	03/22/14 09:41	03/23/14 01:34	EPA 300.0	
Pond 9 UP R-001B (14C1491-04) Water Sampled: 03/20/14 11:15 Received: 03/20/14 21:45										
Chloride	19	0.75	12	mg/l	25	AC42227	03/22/14 09:41	03/23/14 01:49	EPA 300.0	
Pond 9 DN R-002B (14C1491-05) Water Sampled: 03/20/14 11:20 Received: 03/20/14 21:45										
Chloride	63	0.75	12	mg/l	25	AC42227	03/22/14 09:41	03/23/14 02:04	EPA 300.0	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

04/04/14 11:36

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC42420 - General Preparation

Duplicate (AC42420-DUP1)

Source: 14C1502-01

Prepared & Analyzed: 03/21/14

Total Settleable Solids	ND	0.10	0.10	ml/l		ND			200		U
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Batch AC42646 - General Preparation

Blank (AC42646-BLK1)

Prepared: 03/26/14 Analyzed: 03/28/14

Total Dissolved Solids	ND	5.0	10	mg/l							U
------------------------	----	-----	----	------	--	--	--	--	--	--	---

Duplicate (AC42646-DUP1)

Source: 14C1491-01

Prepared: 03/26/14 Analyzed: 03/28/14

Total Dissolved Solids	1040	5.0	10	mg/l		1010			2.34	30	
------------------------	------	-----	----	------	--	------	--	--	------	----	--



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Lehigh Southwest Cement Company
Dallas TX, 75266-0140
PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/04/14 11:36

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AC42227 - General Preparation											
Blank (AC42227-BLK1)					Prepared & Analyzed: 03/22/14						
Chloride	ND	0.030	0.50	mg/l							U
LCS (AC42227-BS1)					Prepared & Analyzed: 03/22/14						
Chloride	11.3	0.030	0.50	mg/l	11.1		101	90-110			
Duplicate (AC42227-DUP1)					Source: 14C1463-03 Prepared & Analyzed: 03/22/14						
Chloride	33.0	0.15	2.5	mg/l		32.8			0.622	20	
Matrix Spike (AC42227-MS1)					Source: 14C1463-03 Prepared & Analyzed: 03/22/14						
Chloride	44.5	0.15	2.5	mg/l	11.1	32.8	105	80-120			
Matrix Spike (AC42227-MS2)					Source: 14C1465-03 Prepared & Analyzed: 03/22/14						
Chloride	45.6	0.15	2.5	mg/l	11.1	32.8	115	80-120			
Matrix Spike Dup (AC42227-MSD1)					Source: 14C1463-03 Prepared & Analyzed: 03/22/14						
Chloride	44.6	0.15	2.5	mg/l	11.1	32.8	106	80-120	0.212	20	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

04/04/14 11:36

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates CHAIN OF CUSTODY

14C1491

Page 1 of 1

Quotation No. PA# 4500551289

PROJECT NO.:		SITE NAME:		ANALYSES				
063-7109-914		Weekly		<div>EDD required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</div> <div>EDF required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</div>				
SAMPLER(S): David Walker (printed) David C. Walcott (signature)		Lehigh S & G Permit						
CONTRACT LABORATORY:		Alpha		Tot Set Mat Chloride, TDS				
TURN-AROUND TIME:		Standard						
Sample I.D.	Lab I.D.	Collection		Matrix	Depth	Type/Vol. Filter Preserv.	Cont. Qty.	Remarks
		Date	Time					
Pond 4 EFF M-001		3-20-14	0900	W		X	1	
Pond 4A DN R-002A			1050			X	1	
Pond 9 EFF M-002			1105			X	1	
Pond 9 UP R-001B			1115			X	1	
Pond 9 DN R-002B			1120			X	1	
Relinquished by: (signature) David C. Walcott		Received by: (signature) [Signature]		Date/Time 3/20/14 1505				
Relinquished by: (signature) [Signature]		Received by: (signature) [Signature]		Date/Time 3-20-14 1800				
Relinquished by: (signature) [Signature]		Received by: (signature) [Signature]		Date/Time 3-20-14 2145				

SEND RESULTS TO:
Attn: George Wegmann, Greg Knapp,
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224



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ELAP Certificate Numbers 1551 and 2728

09 April 2014

Lehigh Southwest Cement Company

Attn: Chow Yip

PO Box 660140 / Attention SSC AP - CEMENT

Dallas, TX 75266-0140

RE: Lehigh S & G Permit

Work Order: 14C1597

Enclosed are the results of analyses for samples received by the laboratory on 03/24/14 21:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



Alpha Analytical Laboratories Inc.

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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

04/09/14 10:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 4A Composite	14C1597-01	Water	03/21/14 10:45	03/24/14 21:45
Pond 9 Composite	14C1597-02	Water	03/21/14 11:30	03/24/14 21:45



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

04/09/14 10:09

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4A Composite (14C1597-01) Water Sampled: 03/21/14 10:45 Received: 03/24/14 21:45										
Total Suspended Solids	ND	0.30	0.50	mg/l	1	AC42729	03/27/14 10:45	03/28/14 16:30	SM2540D	U
Pond 9 Composite (14C1597-02) Water Sampled: 03/21/14 11:30 Received: 03/24/14 21:45										
Total Suspended Solids	4.8	0.30	0.50	mg/l	1	AC42729	03/27/14 15:00	03/28/14 16:30	SM2540D	



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

04/09/14 10:09

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AC42729 - General Preparation

Blank (AC42729-BLK1)

Prepared: 03/27/14 Analyzed: 03/28/14

Total Suspended Solids	ND	0.30	0.50	mg/l						U
------------------------	----	------	------	------	--	--	--	--	--	---

Duplicate (AC42729-DUP1)

Source: 14C1603-01

Prepared: 03/27/14 Analyzed: 03/28/14

Total Suspended Solids	60.0	0.30	0.50	mg/l		100		50.0	30	QD-02
------------------------	------	------	------	------	--	-----	--	------	----	-------

Duplicate (AC42729-DUP2)

Source: 14C1634-01

Prepared: 03/27/14 Analyzed: 03/28/14

Total Suspended Solids	270	0.30	0.50	mg/l		285		5.41	30	
------------------------	-----	------	------	------	--	-----	--	------	----	--



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Lehigh Southwest Cement Company

Dallas TX, 75266-0140

PO Box 660140 / Attention SSC AP - CEMENT

Project Manager: Chow Yip

Project: Lehigh S & G Permit

Project Number: 063-7109-914

Reported:

04/09/14 10:09

Notes and Definitions

QD-02	High duplicate RPD due to sample non-homogeneity.
U	Analyte included in analysis, but not detected at or above MDL.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

14C1597



Golder Associates **CHAIN OF CUSTODY**

Page 1 of 1

Quotation No. **4500554289**

PROJECT NO.: 063-7109-914				SITE NAME: Composite				ANALYSES				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No EDD required?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No EDF required?	
SAMPLER(S): David Walter <small>(printed)</small>				David C. Walt <small>(signature)</small>											
CONTRACT LABORATORY: Alpha				Container Info											
TURN-AROUND TIME: Standard															
Sample I.D.	Lab I.D.	Collection		Matrix	Depth	Type/Vol.	Filter	Preserv.	Cont. Qty.	Remarks					
		Date	Time												
Pond 4A Composite		3-21-14	1045	W		1L			1	Include J-flags					
Pond 9 Composite		3-21-14	1130	W		1			1	5.0g					

SEND RESULTS TO:

Attn: **George Wegmann, Greg Knapp**
Chow Yip
 Golder Associates Inc.
 425 Lakeside Drive
 Sunnyvale, CA 94085
 Phone (408) 220-9223
 Fax (408) 220-9224

Date/Time: **3/21/14 1645**Date/Time: **3/21/14 17:00**Date/Time: **3/24-14 1800**Date/Time: **3-24-14 2145**

Received by: (signature)

Received by: (signature)

Received by: (signature)

Relinquished by: (signature)

Relinquished by: (signature)

Relinquished by: (signature)

white: lab copy

yellow: project



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ELAP Certificate Numbers 1551 and 2728

10 April 2014

Golder Associates - Sunnyvale

Attn: George Wegman

425 Lakeside Drive

Sunnyvale, CA 94085

RE: Lehigh S & G Permit

Work Order: 14C1788

Enclosed are the results of analyses for samples received by the laboratory on 03/26/14 21:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

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Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Golder Associates - Sunnyvale
Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/10/14 14:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 4A Eff M-001	14C1788-01	Water	03/26/14 10:00	03/26/14 21:30
Pond 4A DN R-002A	14C1788-02	Water	03/26/14 11:15	03/26/14 21:30
Pond 9 Eff M-002	14C1788-03	Water	03/26/14 11:30	03/26/14 21:30
Pond 9 UP R-001B	14C1788-04	Water	03/26/14 11:40	03/26/14 21:30
Pond 9 DN R-002B	14C1788-05	Water	03/26/14 11:45	03/26/14 21:30



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Golder Associates - Sunnyvale
Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/10/14 14:08

Metals by EPA 200 Series Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4A DN R-002A (14C1788-02) Water Sampled: 03/26/14 11:15 Received: 03/26/14 21:30										
Calcium	180	0.010	1.0	mg/l	1	AC42824	03/28/14 12:50	04/04/14 16:14	EPA 200.7	
Magnesium	39	0.0080	1.0	"	"	"	"	"	"	
Pond 9 UP R-001B (14C1788-04) Water Sampled: 03/26/14 11:40 Received: 03/26/14 21:30										
Calcium	190	0.010	1.0	mg/l	1	AC42824	03/28/14 12:50	04/04/14 16:19	EPA 200.7	
Magnesium	51	0.0080	1.0	"	"	"	"	"	"	
Pond 9 DN R-002B (14C1788-05) Water Sampled: 03/26/14 11:45 Received: 03/26/14 21:30										
Calcium	180	0.010	1.0	mg/l	1	AC42824	03/28/14 12:50	04/04/14 16:24	EPA 200.7	
Magnesium	48	0.0080	1.0	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Golder Associates - Sunnyvale
Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/10/14 14:08

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4A Eff M-001 (14C1788-01) Water Sampled: 03/26/14 10:00 Received: 03/26/14 21:30										
Oil & Grease (HEM)	1.2	0.80	1.4	mg/l	1	AC42708	03/27/14 08:04	04/02/14 15:37	EPA 1664A	J
Pond 4A DN R-002A (14C1788-02) Water Sampled: 03/26/14 11:15 Received: 03/26/14 21:30										
Salinity	ND	2.0	2.0	g/kg	1	AD40428	04/04/14 12:01	04/04/14 12:41	SM2520B	U
Total Dissolved Solids	1000	5.0	10	mg/l	"	AC42816	03/28/14 10:00	04/01/14 08:30	SM2540C	
Hardness, Total	617	1	5	"	"	AC42824	03/28/14 12:50	04/04/14 16:14	SM2340B	
Pond 9 Eff M-002 (14C1788-03) Water Sampled: 03/26/14 11:30 Received: 03/26/14 21:30										
Oil & Grease (HEM)	1.5	0.80	1.4	mg/l	1	AC42708	03/27/14 08:04	04/02/14 15:37	EPA 1664A	
Total Dissolved Solids	1200	5.0	10	"	"	AC42816	03/28/14 10:00	04/01/14 08:30	SM2540C	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AC42727	03/27/14 13:00	03/27/14 17:00	SM2540F	U
Pond 9 UP R-001B (14C1788-04) Water Sampled: 03/26/14 11:40 Received: 03/26/14 21:30										
Salinity	ND	2.0	2.0	g/kg	1	AD40428	04/04/14 12:01	04/04/14 12:41	SM2520B	U
Total Dissolved Solids	1100	5.0	10	mg/l	"	AC42816	03/28/14 10:00	04/01/14 08:30	SM2540C	
Hardness, Total	692	1	5	"	"	AC42824	03/28/14 12:50	04/04/14 16:19	SM2340B	
Pond 9 DN R-002B (14C1788-05) Water Sampled: 03/26/14 11:45 Received: 03/26/14 21:30										
Salinity	ND	2.0	2.0	g/kg	1	AD40428	04/04/14 12:01	04/04/14 12:41	SM2520B	U
Total Dissolved Solids	1000	5.0	10	mg/l	"	AC42816	03/28/14 10:00	04/01/14 08:30	SM2540C	
Hardness, Total	641	1	5	"	"	AC42824	03/28/14 12:50	04/04/14 16:24	SM2340B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Golder Associates - Sunnyvale
Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/10/14 14:08

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4A DN R-002A (14C1788-02) Water Sampled: 03/26/14 11:15 Received: 03/26/14 21:30										
Chloride	14	0.60	10	mg/l	20	AC43140	03/31/14 15:30	03/31/14 21:14	EPA 300.0	
Pond 9 Eff M-002 (14C1788-03) Water Sampled: 03/26/14 11:30 Received: 03/26/14 21:30										
Chloride	54	0.75	12	mg/l	25	AC43140	03/31/14 15:30	03/31/14 21:29	EPA 300.0	
Pond 9 UP R-001B (14C1788-04) Water Sampled: 03/26/14 11:40 Received: 03/26/14 21:30										
Chloride	20	0.60	10	mg/l	20	AC43140	03/31/14 15:30	03/31/14 21:44	EPA 300.0	
Pond 9 DN R-002B (14C1788-05) Water Sampled: 03/26/14 11:45 Received: 03/26/14 21:30										
Chloride	19	0.60	10	mg/l	20	AC43140	03/31/14 15:30	03/31/14 21:59	EPA 300.0	



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 Project Number: 063-7109-914

Reported:
 04/10/14 14:08

Metals by EPA 200 Series Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AC42824 - Metals Digest											
Blank (AC42824-BLK1)						Prepared: 03/28/14 Analyzed: 04/01/14					
Calcium	ND	0.010	1.0	mg/l							U
Magnesium	ND	0.0080	1.0	"							U
LCS (AC42824-BS1)						Prepared: 03/28/14 Analyzed: 04/01/14					
Calcium	7.20	0.010	1.0	mg/l	8.00		90.0	85-115			
Magnesium	7.30	0.0080	1.0	"	8.00		91.3	85-115			
Duplicate (AC42824-DUP1)						Source: 14C1843-02 Prepared: 03/28/14 Analyzed: 04/01/14					
Calcium	124	0.010	1.0	mg/l		120			3.33	20	
Magnesium	52.5	0.0080	1.0	"		50.5			3.98	20	
Matrix Spike (AC42824-MS1)						Source: 14C1843-02 Prepared: 03/28/14 Analyzed: 04/01/14					
Calcium	130	0.010	1.0	mg/l	8.00	120	116	70-130			
Magnesium	57.9	0.0080	1.0	"	8.00	50.5	92.4	70-130			
Matrix Spike (AC42824-MS2)						Source: 14C1646-01 Prepared: 03/28/14 Analyzed: 04/01/14					
Calcium	56.3	0.010	1.0	mg/l	8.00	50.7	70.3	70-130			
Magnesium	25.6	0.0080	1.0	"	8.00	18.8	85.4	70-130			
Matrix Spike Dup (AC42824-MSD1)						Source: 14C1843-02 Prepared: 03/28/14 Analyzed: 04/01/14					
Calcium	118	0.010	1.0	mg/l	8.00	120	NR	70-130	9.06	20	QM-4X
Magnesium	55.2	0.0080	1.0	"	8.00	50.5	59.6	70-130	4.65	20	QM-4X

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Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/10/14 14:08

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
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Batch AC42708 - General Preparation

Blank (AC42708-BLK1)					Prepared: 03/27/14 Analyzed: 04/02/14				
Oil & Grease (HEM)	ND	0.80	1.4	mg/l					U
LCS (AC42708-BS1)					Prepared: 03/27/14 Analyzed: 04/02/14				
Oil & Grease (HEM)	34.9	0.80	1.4	mg/l	40.0	87.2	78-114	18	
LCS Dup (AC42708-BSD1)					Prepared: 03/27/14 Analyzed: 04/02/14				
Oil & Grease (HEM)	37.4	0.80	1.4	mg/l	40.0	93.5	78-114	6.92	18
Matrix Spike (AC42708-MS1)					Source: 14C1795-02 Prepared: 03/27/14 Analyzed: 04/02/14				
Oil & Grease (HEM)	18.3	0.80	1.4	mg/l	20.0	2.10	81.0	78-114	18

Batch AC42816 - General Preparation

Blank (AC42816-BLK1)					Prepared: 03/28/14 Analyzed: 04/01/14				
Total Dissolved Solids	ND	5.0	10	mg/l					U
Duplicate (AC42816-DUP1)					Source: 14C1788-02 Prepared: 03/28/14 Analyzed: 04/01/14				
Total Dissolved Solids	928	5.0	10	mg/l	1010			8.66	30
Duplicate (AC42816-DUP2)					Source: 14C1817-02 Prepared: 03/28/14 Analyzed: 04/01/14				
Total Dissolved Solids	297	5.0	10	mg/l	308			3.64	30

Batch AC42824 - Metals Digest

Blank (AC42824-BLK1)					Prepared: 03/28/14 Analyzed: 04/01/14				
Hardness, Total	ND	1	5	mg/l					U



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Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/10/14 14:08

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AC42824 - Metals Digest

Duplicate (AC42824-DUP1)

Source: 14C1843-02

Prepared: 03/28/14 Analyzed: 04/01/14

Hardness, Total	527	1	5	mg/l		508			3.60	20	
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Project Number: 063-7109-914

Reported:
04/10/14 14:08

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch AC43140 - General Preparation										
Blank (AC43140-BLK1)					Prepared & Analyzed: 03/31/14					
Chloride	ND	0.030	0.50	mg/l						U
LCS (AC43140-BS1)					Prepared & Analyzed: 03/31/14					
Chloride	10.8	0.030	0.50	mg/l	11.1		97.3	90-110		
Duplicate (AC43140-DUP1)					Source: 14C1981-01 Prepared & Analyzed: 03/31/14					
Chloride	4.57	0.030	0.50	mg/l		4.56		0.0657	20	
Matrix Spike (AC43140-MS1)					Source: 14C1981-01 Prepared & Analyzed: 03/31/14					
Chloride	15.8	0.030	0.50	mg/l	11.1	4.56	102	80-120		
Matrix Spike (AC43140-MS2)					Source: 14C2019-01 Prepared & Analyzed: 03/31/14					
Chloride	15.4	0.15	2.5	mg/l	11.1	4.97	94.1	80-120		
Matrix Spike Dup (AC43140-MSD1)					Source: 14C1981-01 Prepared & Analyzed: 03/31/14					
Chloride	15.7	0.030	0.50	mg/l	11.1	4.56	100	80-120	1.07	20



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Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/10/14 14:08

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
U	Analyte included in analysis, but not detected at or above MDL.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

14C 1788

Golder Associates CHAIN OF CUSTODY



Page 1 of 1
Quotation No. P04500554289

PROJECT NO.: 063-7109-914		SITE NAME: (Monthly) Lehigh STG permit		ANALYSES		EDD required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
SAMPLER(S): David Walter (printed)		SAMPLER(S): David C. Walte (signature)		TDS, Chloride 0 + G Hardness salinity		EDF required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
CONTRACT LABORATORY: Alpha		Container Info		Type/Vol.		Cont. Qty.	
TURN-AROUND TIME: Standard		Matrix		Filter		Remarks	
Sample I.D.	Lab I.D.	Collection		Depth	Preserv.	Remarks	Cont. Qty.
		Date	Time				
Pond 4A Eff M-001	3-26-14	1000	W			Pond 4A Eff-M001	3
Pond 4A DN R-002A	1115					Amber broken and cut 1/2	1
Pond 9 Eff M-002	1130					Gal poly leaving no sample for set sol, TDS, Cl.	3
Pond 9 UP R-001B	1140					Canceled all but OEG. Adv	1
Pond 9 DN R-002B	1145					Robbie. AK 3/27/14	1

SEND RESULTS TO:

Attn: George Wegmann, Greg Knapp,
Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

Relinquished by (signature) David C. Walte	Received by (signature) Jan John	Date/Time 3/26/14 1608
Relinquished by (signature) Jan John	Received by (signature) Jan John	Date/Time 3-26-14 1800
Relinquished by (signature) Jan John	Received by (signature) Jan John	Date/Time 3-27-14 2130



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ELAP Certificate Numbers 1551 and 2728

11 April 2014

Golder Associates - Sunnyvale

Attn: George Wegman

425 Lakeside Drive

Sunnyvale, CA 94085

RE: Lehigh S & G Permit

Work Order: 14C1913

Enclosed are the results of analyses for samples received by the laboratory on 03/27/14 21:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



alpha

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Golder Associates - Sunnyvale
Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/11/14 11:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 4A EFF M-001	14C1913-01	Water	03/27/14 13:10	03/27/14 21:40
Pond 4A Composite	14C1913-02	Water	03/27/14 13:10	03/27/14 21:40
Pond 9 Composite	14C1913-03	Water	03/27/14 14:00	03/27/14 21:40



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Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/11/14 11:08

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 4A EFF M-001 (14C1913-01) Water Sampled: 03/27/14 13:10 Received: 03/27/14 21:40										
Total Dissolved Solids	1000	5.0	10	mg/l	1	AC43125	03/31/14 09:15	04/02/14 12:30	SM2540C	U
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AD40143	03/28/14 16:00	03/28/14 17:00	SM2540F	
Pond 4A Composite (14C1913-02) Water Sampled: 03/27/14 13:10 Received: 03/27/14 21:40										
Total Suspended Solids	0.84	0.30	0.50	mg/l	1	AD40125	04/01/14 08:09	04/02/14 11:24	SM2540D	
Pond 9 Composite (14C1913-03) Water Sampled: 03/27/14 14:00 Received: 03/27/14 21:40										
Total Suspended Solids	5.4	0.30	0.50	mg/l	1	AD40125	04/01/14 08:09	04/02/14 11:24	SM2540D	



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Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/11/14 11:08

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 4A EFF M-001 (14C1913-01) Water Sampled: 03/27/14 13:10 Received: 03/27/14 21:40											
Chloride	13	0.15	2.5		mg/l	5	AC42835	03/28/14 12:00	04/01/14 05:02	EPA 300.0	



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Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/11/14 11:08

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AC43125 - General Preparation

Blank (AC43125-BLK1)

Prepared: 03/31/14 Analyzed: 04/02/14

Total Dissolved Solids	ND	5.0	10	mg/l						U
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Duplicate (AC43125-DUP1)

Source: 14C1857-02

Prepared: 03/31/14 Analyzed: 04/02/14

Total Dissolved Solids	568	5.0	10	mg/l		544		4.32	30	
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Duplicate (AC43125-DUP2)

Source: 14C1913-01

Prepared: 03/31/14 Analyzed: 04/02/14

Total Dissolved Solids	928	5.0	10	mg/l		1010		8.26	30	
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Batch AD40125 - General Preparation

Blank (AD40125-BLK1)

Prepared: 04/01/14 Analyzed: 04/02/14

Total Suspended Solids	ND	0.30	0.50	mg/l						U
------------------------	----	------	------	------	--	--	--	--	--	---

Duplicate (AD40125-DUP1)

Source: 14C1844-04

Prepared: 04/01/14 Analyzed: 04/02/14

Total Suspended Solids	303	0.30	0.50	mg/l		320		5.35	30	
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Duplicate (AD40125-DUP2)

Source: 14C1963-01

Prepared: 04/01/14 Analyzed: 04/02/14

Total Suspended Solids	305	0.30	0.50	mg/l		320		4.65	30	
------------------------	-----	------	------	------	--	-----	--	------	----	--



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Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/11/14 11:08

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch AC42835 - General Preparation										
Blank (AC42835-BLK1)					Prepared & Analyzed: 03/28/14					
Chloride	ND	0.030	0.50	mg/l						U
LCS (AC42835-BS1)					Prepared & Analyzed: 03/28/14					
Chloride	12.0	0.030	0.50	mg/l	11.1		108	90-110		
Duplicate (AC42835-DUP1)					Source: 14C1895-01 Prepared: 03/28/14 Analyzed: 04/01/14					
Chloride	6.56	0.030	0.50	mg/l		6.63		1.08	20	
Matrix Spike (AC42835-MS1)					Source: 14C1895-01 Prepared: 03/28/14 Analyzed: 04/01/14					
Chloride	17.9	0.030	0.50	mg/l	11.1	6.63	102	80-120		
Matrix Spike (AC42835-MS2)					Source: 14C1900-01 Prepared: 03/28/14 Analyzed: 04/01/14					
Chloride	15.3	0.030	0.50	mg/l	11.1	3.61	105	80-120		
Matrix Spike Dup (AC42835-MSD1)					Source: 14C1895-01 Prepared: 03/28/14 Analyzed: 04/01/14					
Chloride	17.5	0.030	0.50	mg/l	11.1	6.63	98.2	80-120	2.21	20



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425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/11/14 11:08

Notes and Definitions

U Analyte included in analysis, but not detected at or above MDL.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Golder Associates

Golder Associates CHAIN OF CUSTODY

ANALYSES

PROJECT NO.: 063-7109-914

SITE NAME: (Composite)
Lehigh St 6 permit

SAMPLER(S):

David Walter
(printed)

David C. Walt
(signature)

CONTRACT LABORATORY:

Alpha

TURN-AROUND TIME:

Standard

EDD required?
☒ Yes ☐ No

EDF required?
☐ Yes ☒ No

Sample I.D.	Lab I.D.	Collection		Matrix	Depth	Type/Vol.	Filter	Preserv.	Cont. Qty.	Remarks
		Date	Time							
Pond 4A Eff m-001		3-27-14	1310	W		1L 1kg	N	N	1	Include J-Flags
Pond 4A Composite			1310	W						
Pond 9 Composite			1400	W						

Relinquished by: (signature)

David C. Walt
(signature)

Relinquished by: (signature)

David C. Walt
(signature)

Relinquished by: (signature)

David C. Walt
(signature)

Received by: (signature)

David C. Walt
(signature)

Received by: (signature)

David C. Walt
(signature)

Received by: (signature)

David C. Walt
(signature)

Date/Time:

3/27/14 1455

Date/Time:

3-27-14 1910

Date/Time:

3-27-14 2140

SEND RESULTS TO:

Attn: George Wegmann, Greg Knapp,
Chow Yip

Golder Associates Inc.

425 Lakeside Drive

Sunnyvale, CA 94085

Phone (408) 220-9223

Fax (408) 220-9224



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com

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Satellite Laboratory: 6398 Dougherty Rd., Suite 35, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

ELAP Certificate Numbers 1551 and 2728

16 April 2014

Golder Associates - Sunnyvale

Attn: George Wegman

425 Lakeside Drive

Sunnyvale, CA 94085

RE: Lehigh S & G Permit

Work Order: 14D0013

Enclosed are the results of analyses for samples received by the laboratory on 03/31/14 21:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Robbie C. Phillips
Project Manager



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Golder Associates - Sunnyvale
Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/16/14 11:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 17 EFF M-001	14D0013-01	Water	03/30/14 12:20	03/31/14 21:30
Pond 17 DN R-002D	14D0013-02	Water	03/30/14 12:30	03/31/14 21:30



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Golder Associates - Sunnyvale
Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/16/14 11:25

Metals by EPA 200 Series Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 17 DN R-002D (14D0013-02) Water Sampled: 03/30/14 12:30 Received: 03/31/14 21:30											
Calcium	180	0.010	1.0	mg/l	1	AD40140	04/02/14 14:57	04/08/14 17:06	EPA 200.7		
Magnesium	51	0.0080	1.0	"	"	"	"	"	"		



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Golder Associates - Sunnyvale
Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/16/14 11:25

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 17 EFF M-001 (14D0013-01) Water Sampled: 03/30/14 12:20 Received: 03/31/14 21:30										
Oil & Grease (HEM)	3.0	0.80	1.4	mg/l	1	AD40728	04/07/14 08:00	04/10/14 08:20	EPA 1664A	QC-MS
Total Dissolved Solids	720	5.0	10	"	"	AD40225	04/02/14 09:30	04/07/14 08:30	SM2540C	
Total Suspended Solids	20	0.30	0.50	"	"	AD40244	04/02/14 16:03	04/07/14 15:45	SM2540D	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AD40413	04/01/14 16:00	04/01/14 17:00	SM2540F	U
Pond 17 DN R-002D (14D0013-02) Water Sampled: 03/30/14 12:30 Received: 03/31/14 21:30										
Salinity	ND	2.0	2.0	g/kg	1	AD40428	04/04/14 12:01	04/04/14 12:41	SM2520B	U
Total Dissolved Solids	1000	5.0	10	mg/l	"	AD40225	04/02/14 09:30	04/07/14 08:30	SM2540C	
Hardness, Total	653	1	5	"	"	AD40140	04/02/14 14:57	04/08/14 17:06	SM2340B	



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Golder Associates - Sunnyvale
Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/16/14 11:25

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 17 EFF M-001 (14D0013-01) Water Sampled: 03/30/14 12:20 Received: 03/31/14 21:30										
Chloride	96	0.60	10	mg/l	20	AD40127	04/01/14 10:00	04/01/14 11:38	EPA 300.0	
Pond 17 DN R-002D (14D0013-02) Water Sampled: 03/30/14 12:30 Received: 03/31/14 21:30										
Chloride	23	0.60	10	mg/l	20	AD40127	04/01/14 10:00	04/01/14 12:08	EPA 300.0	



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Golder Associates - Sunnyvale
Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/16/14 11:25

Metals by EPA 200 Series Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AD40140 - Metals Digest											
Blank (AD40140-BLK1)						Prepared: 04/01/14 Analyzed: 04/03/14					
Calcium	ND	0.010	1.0	mg/l							U
Magnesium	ND	0.0080	1.0	"							U
LCS (AD40140-BS1)						Prepared: 04/01/14 Analyzed: 04/03/14					
Calcium	7.43	0.010	1.0	mg/l	8.00		92.9	85-115			
Magnesium	7.61	0.0080	1.0	"	8.00		95.2	85-115			
Duplicate (AD40140-DUP1)						Source: 14C1957-01 Prepared: 04/01/14 Analyzed: 04/03/14					
Calcium	192	0.010	1.0	mg/l		205			6.65	20	
Magnesium	36.1	0.0080	1.0	"		38.2			5.60	20	
Matrix Spike (AD40140-MS1)						Source: 14C1957-01 Prepared: 04/01/14 Analyzed: 04/03/14					
Calcium	176	0.010	1.0	mg/l	8.00	205	NR	70-130			QM-4X
Magnesium	38.4	0.0080	1.0	"	8.00	38.2	2.79	70-130			QM-4X
Matrix Spike (AD40140-MS2)						Source: 14C2030-02 Prepared: 04/01/14 Analyzed: 04/03/14					
Calcium	26.9	0.010	1.0	mg/l	8.00	20.7	77.4	70-130			
Magnesium	17.8	0.0080	1.0	"	8.00	11.1	82.9	70-130			
Matrix Spike Dup (AD40140-MSD1)						Source: 14C1957-01 Prepared: 04/01/14 Analyzed: 04/03/14					
Calcium	201	0.010	1.0	mg/l	8.00	205	NR	70-130	13.4	20	QM-4X
Magnesium	44.3	0.0080	1.0	"	8.00	38.2	76.2	70-130	14.2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Golder Associates - Sunnyvale
Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/16/14 11:25

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
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Batch AD40140 - Metals Digest

Blank (AD40140-BLK1)

Prepared: 04/01/14 Analyzed: 04/03/14

Hardness, Total	ND	1	5	mg/l					U
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Duplicate (AD40140-DUP1)

Source: 14C1957-01

Prepared: 04/01/14 Analyzed: 04/03/14

Hardness, Total	627	1	5	mg/l		669		6.40	20
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Batch AD40225 - General Preparation

Blank (AD40225-BLK1)

Prepared: 04/02/14 Analyzed: 04/07/14

Total Dissolved Solids	ND	5.0	10	mg/l					U
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Duplicate (AD40225-DUP1)

Source: 14C1875-01

Prepared: 04/02/14 Analyzed: 04/07/14

Total Dissolved Solids	550	5.0	10	mg/l		544		1.10	30
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Duplicate (AD40225-DUP2)

Source: 14C1933-01

Prepared: 04/02/14 Analyzed: 04/07/14

Total Dissolved Solids	676	5.0	10	mg/l		664		1.79	30
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Batch AD40244 - General Preparation

Blank (AD40244-BLK1)

Prepared: 04/02/14 Analyzed: 04/07/14

Total Suspended Solids	ND	0.30	0.50	mg/l					U
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Duplicate (AD40244-DUP1)

Source: 14D0170-02

Prepared: 04/02/14 Analyzed: 04/07/14

Total Suspended Solids	4530	0.30	0.50	mg/l		3960		13.5	30
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Duplicate (AD40244-DUP2)

Source: 14D0195-01

Prepared: 04/02/14 Analyzed: 04/07/14

Total Suspended Solids	169	0.30	0.50	mg/l		179		6.09	30
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Golder Associates - Sunnyvale
 Sunnyvale CA, 94085
 425 Lakeside Drive

Project Manager: George Wegman
 Project: Lehigh S & G Permit
 Project Number: 063-7109-914

Reported:
 04/16/14 11:25

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch AD40413 - General Preparation

Duplicate (AD40413-DUP1)

Source: 14D0010-01

Prepared & Analyzed: 04/01/14

Total Settleable Solids	ND	0.10	0.10	ml/l		ND			200	U
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Batch AD40728 - General Preparation

Blank (AD40728-BLK1)

Prepared: 04/07/14 Analyzed: 04/10/14

Oil & Grease (HEM)	ND	0.80	1.4	mg/l						U
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LCS (AD40728-BS1)

Prepared: 04/07/14 Analyzed: 04/10/14

Oil & Grease (HEM)	35.7	0.80	1.4	mg/l	40.0	89.2	78-114		18	
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LCS Dup (AD40728-BSD1)

Prepared: 04/07/14 Analyzed: 04/10/14

Oil & Grease (HEM)	34.2	0.80	1.4	mg/l	40.0	85.5	78-114	4.29	18	
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425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/16/14 11:25

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AD40127 - General Preparation											
Blank (AD40127-BLK1)					Prepared & Analyzed: 04/01/14						
Chloride	0.139	0.030	0.50	mg/l							J
LCS (AD40127-BS1)					Prepared & Analyzed: 04/01/14						
Chloride	10.9	0.030	0.50	mg/l	11.1		98.1	90-110			
Duplicate (AD40127-DUP1)					Source: 14D0031-03 Prepared & Analyzed: 04/01/14						
Chloride	31.3	0.15	2.5	mg/l		31.1			0.561	20	
Matrix Spike (AD40127-MS1)					Source: 14D0031-03 Prepared & Analyzed: 04/01/14						
Chloride	42.4	0.15	2.5	mg/l	11.1	31.1	101	80-120			
Matrix Spike (AD40127-MS2)					Source: 14C2033-03 Prepared & Analyzed: 04/01/14						
Chloride	15.5	0.030	0.50	mg/l	11.1	4.24	101	80-120			
Matrix Spike Dup (AD40127-MSD1)					Source: 14D0031-03 Prepared & Analyzed: 04/01/14						
Chloride	41.9	0.15	2.5	mg/l	11.1	31.1	96.7	80-120	1.25	20	



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425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/16/14 11:25

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QC-MS	MS/MSD not included with this batch due to insufficient sample volume.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
U	Analyte included in analysis, but not detected at or above MDL.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



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ELAP Certificate Numbers 1551 and 2728

18 April 2014

Golder Associates - Sunnyvale

Attn: George Wegman

425 Lakeside Drive

Sunnyvale, CA 94085

RE: Lehigh S & G Permit

Work Order: 14D0259

Enclosed are the results of analyses for samples received by the laboratory on 04/02/14 21:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tabatha J. Pryor For Robbie C. Phillips
Project Manager



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425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/18/14 16:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pond 20 Eff M-005	14D0259-01	Water	03/31/14 15:10	04/02/14 21:45
Pond 20 DN R-002E	14D0259-02	Water	03/31/14 15:20	04/02/14 21:45



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Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/18/14 16:47

Metals by EPA 200 Series Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Limit								
Pond 20 DN R-002E (14D0259-02) Water Sampled: 03/31/14 15:20 Received: 04/02/14 21:45											
Calcium	210	0.010	1.0		mg/l	1	AD40750	04/07/14 11:56	04/09/14 18:24	EPA 200.7	
Magnesium	18	0.0080	1.0		"	"	"	"	"	"	



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Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/18/14 16:47

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 20 Eff M-005 (14D0259-01) Water Sampled: 03/31/14 15:10 Received: 04/02/14 21:45										
Oil & Grease (HEM)	1.4	0.80	1.4	mg/l	1	AD41007	04/10/14 07:58	04/15/14 16:51	EPA 1664A	QC-MS
Total Dissolved Solids	470	5.0	10	"	"	AD40411	04/04/14 10:00	04/10/14 12:30	SM2540C	
Total Suspended Solids	1000	0.30	0.50	"	"	AD40723	04/07/14 10:00	04/10/14 11:00	SM2540D	
Total Settleable Solids	ND	0.10	0.10	ml/l	"	AD40734	04/03/14 13:00	04/03/14 17:00	SM2540F	T-2, U
Pond 20 DN R-002E (14D0259-02) Water Sampled: 03/31/14 15:20 Received: 04/02/14 21:45										
Salinity	ND	2.0	2.0	g/kg	1	AD40428	04/04/14 12:01	04/04/14 12:41	SM2520B	U
Total Dissolved Solids	630	5.0	10	mg/l	"	AD40411	04/04/14 10:00	04/10/14 12:30	SM2540C	
Hardness, Total	592	1	5	"	"	AD40750	04/07/14 11:56	04/09/14 18:24	SM2340B	



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Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/18/14 16:47

Anions by EPA Method 300.0
Alpha Analytical Laboratories, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		MDL	Limit							
Pond 20 Eff M-005 (14D0259-01) Water Sampled: 03/31/14 15:10 Received: 04/02/14 21:45										
Chloride	15	0.030	0.50	mg/l	1	AD41228	04/12/14 08:30	04/12/14 23:44	EPA 300.0	
Pond 20 DN R-002E (14D0259-02) Water Sampled: 03/31/14 15:20 Received: 04/02/14 21:45										
Chloride	35	0.15	2.5	mg/l	5	AD41228	04/12/14 08:30	04/13/14 00:14	EPA 300.0	



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Golder Associates - Sunnyvale
 Sunnyvale CA, 94085
 425 Lakeside Drive

Project Manager: George Wegman
 Project: Lehigh S & G Permit
 Project Number: 063-7109-914

Reported:
 04/18/14 16:47

Metals by EPA 200 Series Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AD40750 - Metals Digest											
Blank (AD40750-BLK1)						Prepared: 04/07/14 Analyzed: 04/09/14					
Calcium	ND	0.010	1.0	mg/l							U
Magnesium	ND	0.0080	1.0	"							U
LCS (AD40750-BS1)						Prepared: 04/07/14 Analyzed: 04/09/14					
Calcium	6.96	0.010	1.0	mg/l	8.00		87.0	85-115			
Magnesium	7.14	0.0080	1.0	"	8.00		89.3	85-115			
Duplicate (AD40750-DUP1)						Source: 14D0387-01 Prepared: 04/07/14 Analyzed: 04/09/14					
Calcium	77.9	0.010	1.0	mg/l		72.5			7.15	20	
Magnesium	17.1	0.0080	1.0	"		16.3			4.85	20	
Matrix Spike (AD40750-MS1)						Source: 14D0387-01 Prepared: 04/07/14 Analyzed: 04/09/14					
Calcium	77.5	0.010	1.0	mg/l	8.00	72.5	62.6	70-130			QM-4X
Magnesium	22.9	0.0080	1.0	"	8.00	16.3	82.8	70-130			
Matrix Spike (AD40750-MS2)						Source: 14D0321-01 Prepared: 04/07/14 Analyzed: 04/09/14					
Calcium	7.10	0.010	1.0	mg/l	8.00	0.0685	87.9	70-130			
Magnesium	7.24	0.0080	1.0	"	8.00	0.0148	90.4	70-130			
Matrix Spike Dup (AD40750-MSD1)						Source: 14D0387-01 Prepared: 04/07/14 Analyzed: 04/09/14					
Calcium	78.7	0.010	1.0	mg/l	8.00	72.5	76.9	70-130	1.47	20	
Magnesium	23.6	0.0080	1.0	"	8.00	16.3	91.4	70-130	2.95	20	



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Golder Associates - Sunnyvale
 Sunnyvale CA, 94085
 425 Lakeside Drive

Project Manager: George Wegman
 Project: Lehigh S & G Permit
 Project Number: 063-7109-914

Reported:
 04/18/14 16:47

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AD40411 - General Preparation

Blank (AD40411-BLK1)		Prepared: 04/04/14 Analyzed: 04/10/14									
Total Dissolved Solids	ND	5.0	10	mg/l							U
Duplicate (AD40411-DUP1)		Source: 14D0136-03		Prepared: 04/04/14 Analyzed: 04/10/14							
Total Dissolved Solids	354	5.0	10	mg/l		364			2.79	30	
Duplicate (AD40411-DUP2)		Source: 14D0217-04		Prepared: 04/04/14 Analyzed: 04/10/14							
Total Dissolved Solids	944	5.0	10	mg/l		1000			6.16	30	

Batch AD40723 - General Preparation

Blank (AD40723-BLK1)		Prepared: 04/07/14 Analyzed: 04/10/14									
Total Suspended Solids	ND	0.30	0.50	mg/l							U
Duplicate (AD40723-DUP1)		Source: 14D0173-01		Prepared: 04/07/14 Analyzed: 04/10/14							
Total Suspended Solids	206	0.30	0.50	mg/l		170			19.1	30	
Duplicate (AD40723-DUP2)		Source: 14D0201-01		Prepared: 04/07/14 Analyzed: 04/10/14							
Total Suspended Solids	91.4	0.30	0.50	mg/l		91.4			0.00	30	

Batch AD40750 - Metals Digest

Blank (AD40750-BLK1)		Prepared: 04/07/14 Analyzed: 04/09/14									
Hardness, Total	ND	1	5	mg/l							U
Duplicate (AD40750-DUP1)		Source: 14D0387-01		Prepared: 04/07/14 Analyzed: 04/09/14							
Hardness, Total	265	1	5	mg/l		248			6.53	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Sunnyvale CA, 94085
425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/18/14 16:47

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
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Batch AD41007 - General Preparation

Blank (AD41007-BLK1)

Prepared: 04/10/14 Analyzed: 04/15/14

Oil & Grease (HEM)	0.800	0.80	1.4	mg/l					J
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LCS (AD41007-BS1)

Prepared: 04/10/14 Analyzed: 04/15/14

Oil & Grease (HEM)	34.9	0.80	1.4	mg/l	40.0	87.2	78-114	18	
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LCS Dup (AD41007-BSD1)

Prepared: 04/10/14 Analyzed: 04/15/14

Oil & Grease (HEM)	35.8	0.80	1.4	mg/l	40.0	89.5	78-114	2.55	18
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Reported:
04/18/14 16:47

Anions by EPA Method 300.0 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AD41228 - General Preparation

Blank (AD41228-BLK1)

Prepared & Analyzed: 04/12/14

Chloride	ND	0.030	0.50	mg/l							U
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LCS (AD41228-BS1)

Prepared & Analyzed: 04/12/14

Chloride	9.89	0.030	0.50	mg/l	10.0		98.9	90-110			
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Duplicate (AD41228-DUP1)

Source: 14D1054-01

Prepared: 04/12/14 Analyzed: 04/14/14

Chloride	59.8	0.15	2.5	mg/l		56.1			6.51	20	
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Matrix Spike (AD41228-MS1)

Source: 14D1054-01

Prepared: 04/12/14 Analyzed: 04/15/14

Chloride	67.7	0.15	2.5	mg/l	11.1	56.1	104	80-120			
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Matrix Spike (AD41228-MS2)

Source: 14D0645-02

Prepared: 04/12/14 Analyzed: 04/13/14

Chloride	16.2	0.030	0.50	mg/l	11.1	5.19	99.5	80-120			
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Matrix Spike Dup (AD41228-MSD1)

Source: 14D1054-01

Prepared: 04/12/14 Analyzed: 04/15/14

Chloride	69.0	0.15	2.5	mg/l	11.1	56.1	117	80-120	2.03	20	
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425 Lakeside Drive

Project Manager: George Wegman
Project: Lehigh S & G Permit
Project Number: 063-7109-914

Reported:
04/18/14 16:47

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QC-MS	MS/MSD not included with this batch due to insufficient sample volume.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
T-2	Sample analyzed outside of recommended holding time per client.
U	Analyte included in analysis, but not detected at or above MDL.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



65200171

Page 1 of 1

Quotation No. Po# 4500554289

PROJECT NO.:		SITE NAME:		ANALYSES				EDD required?	
SAMPLER(S):		CONTRACT LABORATORY:		EDF required?					
TURN-AROUND TIME:		Container Info							
Sample I.D.	Lab I.D.	Collection Date	Collection Time	Matrix	Depth	Type/Vol.	Filter	Preserv.	Remarks
Pond 20 Eff M-205	3-31-14	1510	W						
Pond 20 DN R-002E	3-31-14	1520	W						
Total Set Mat: 0.6 TDS, Chloride Hardness, Salinity									
EDD required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No EDF required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									
SEND RESULTS TO: Attn: George Wegmann, Greg Knapp, Golden Associates Inc. 425 Lakeside Drive Sunnyvale, CA 94085 Phone (408) 220-9223 Fax (408) 220-9224									

white:	lab copy	yellow:	project file
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Sean Foley@Alpha Labs

From: "Robbie Phillips" <Robbie@alpha-labs.com>
To: "Foley Sean" <sfoley@alpha-labs.com>
Cc: "DeVillier Kimberly" <Kimberly_DeVillier@golder.com>
Sent: Monday, April 07, 2014 11:18 AM
Subject: 14D0259 Golder

Hello Sean,

Per our conversation, please add TSS to the Pond 20 EFF grab sample only and rush since it expires at approx 15:00 this afternoon.

Thanks again!

Robbie C. Phillips
Alpha Analytical Laboratories, Inc.
President
P. 925-828-6226
F. 925-828-6309
M. 650-464-3237

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4/7/2014